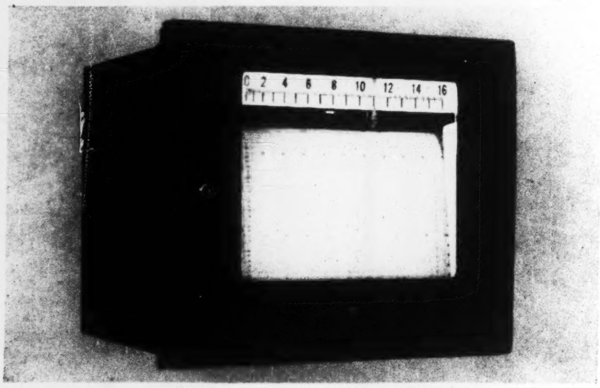
INSTRUMENTS and AUTOMATION

1959 BUYERS' GUIDE

INSTRUMENTS



NEW STRIP-CHART RECORDER

Newest member of the General Electric recorder family, this null-balance, wide-chart recorder achieves continuous measurement and control at all times by means of a silicon-diode reference. The use of this reference-voltage source provides an inherent simplicity not previously available.

The new design eliminates dry cell, standard cell, and standardizing mechanism. All components are unit-mounted on a swing-out mechanism panel for easy accessibility. Plug-in components and printed circuits are used throughout the instrument.

Recorders, Indicators and Controllers

The addition of a new null-balance strip-chart recorder to General Electric's widely accepted line of instruments now makes available from one source a large selection of instruments for electrical measurement.

In the power-generation field, General Electric instruments are widely used for measuring or telemetering watts, vars, and amperes; and for measuring frequency and power factor.

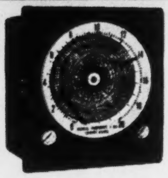
For other applications a variety of circuits are used in measuring and controlling such variables as:

Temperature
Displacement
Pressure
pH
Torque
Turbidity
Tension
Speed
Weight
Vacuum

For further information about these and other G-E instruments, write to General Electric Company, Section 585-77, Schenectady 5, N. Y.

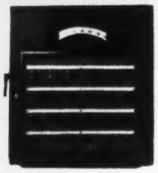
585-77

INSTRUMENTS FOR PACKAGED MEASUREMENT SYSTEMS

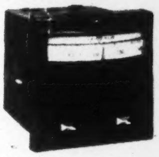


Type HE Recorder

Type CH Recorder



Type HJ Indicator



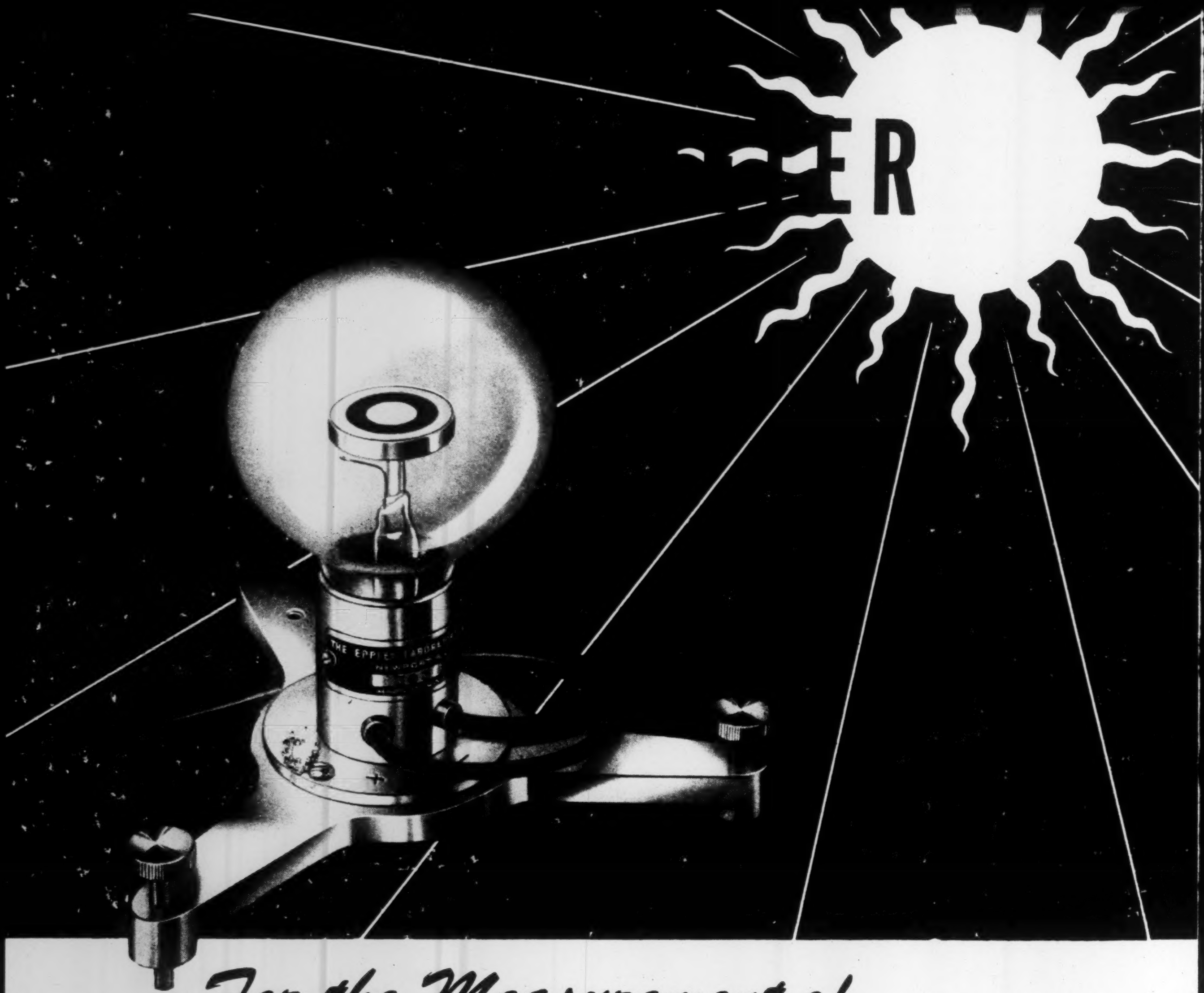
Type HP-30 Millivoltmeter

Type DB-16 Indicator

Type DW-91 Indicator

GENERAL ELECTRIC

For more information circle **1** on inquiry card.



For the Measurement of
SOLAR RADIATION

Eppley Pyrheliometers are used for solar radiation measurements at ninety-eight weather stations in the continental United States, Canada, Alaska, Greenland, Iceland, Caribbean Sea, and the Pacific Ocean. Sixty-two of these stations are under the direction of the United States Weather Bureau. The Eppley Pyrheliometer was adopted as standard equipment by the Weather Bureau after considerable experimentation. It was found to be the best instrument so far tested by the Bureau.

Used in conjunction with a suitable recorder, the Eppley Pyrheliometer will provide an accurate and reliable record of total solar and sky radiation on a horizontal surface.

Bulletin No. 2 on Request

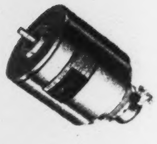
Address: 3 Sheffield Ave., Newport, R.I.

THE EPPLEY LABORATORY, INC.

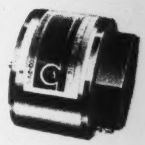
NEWPORT — RHODE ISLAND — U. S. A.

SHAFT POSITION TO DIGITAL ENCODERS AND READOUTS

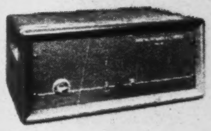
10 bit/turn Shaft Encoder in true Binary...converts shaft position to non-ambiguous true binary data representing input shaft position to 1 part in 1024 for each revolution. Used as input-output devices for true binary digital computers. **No external logic required.**



BCD Shaft Encoder...used where conversion to decimal form with ease is a requirement. All binary lines representing a decimal digit are parallel for ease of recording.

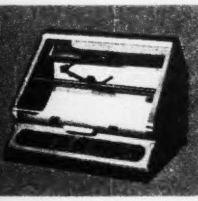


Sine-Cosine Shaft Encoder...presents sine and cosine functions simultaneously and independently. In addition, the limit one, quadrant and polarity data are supplied. Ideal for airborne automatic navigation systems, weapon control and tracking systems.

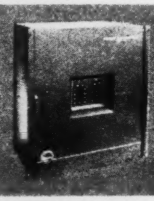


Digital Readout...performs logical brush selection operation in encoders using "V" scan. Also translates the unambiguous BCD encoder representation into parallel decimal form. Suitable for electric printers, lamp banks, etc.

PLOTTING AND RECORDING EQUIPMENT

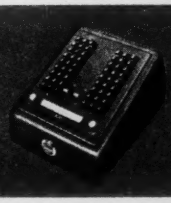


X-Y Plotter...for point or continuous plotting, with positive mechanical drive for recording graphic data. Several models available.



Punched Tape Converter...converts the digital information read from punched paper tape into input signals to the Librascope X-Y Plotter.

Punched Card Converter...converts data from IBM punched cards into analog input signals to the Librascope X-Y Plotter.

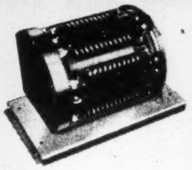


X-Y Decimal Keyboard...consists of a three-decimal bank for each axis with associated plus-minus keys.

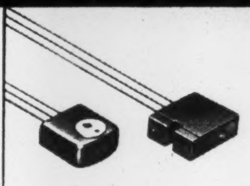
computing components instrumentation & controls

BY LIBRASCOPE

DIGITAL AND ANALOG COMPUTER COMPONENTS

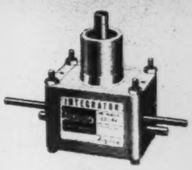


Magnetic Storage Drums...for medium storage applications; capacity 131, 072 non-volatile bits; several speeds; clock frequency 130 kc. Other models available.



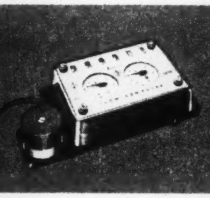
Read-Record Heads...for high frequency, non-contact recording applications in magnetic memory systems; high readback signals. Transistor windings available.

Hollow and Solid Shaft Differentials...designed for high accuracy in additive and subtractive operations...has primary applications to angular velocity, sums and difference, and sequence operations.

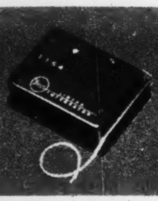


Ball-Disc Integrator...for use in totalizing, rate determination, differential analyzers, closed loop servo-element, variable speed drive, temperature correction, etc.

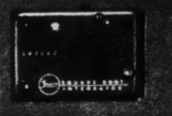
FLOW, VOLUME, AND AREA COMPUTING EQUIPMENT



Flow Computer...extracts square root and continuously integrates both differential and static pressures for applications such as orifice measurement of gas.



Linear Integrator...for systems or instruments requiring integration, average computations, direct or remote reading...mounts in strip chart recorders.



Square Root Integrator...designed for the flowmetering industry to provide an economical, continuous, and compact integrator for automatic totalization of liquid flow.

Planimeters...for miniature strip chart recorders for simple integration with variable speed control; 2 models: square root and linear.

COMPUTERS, CONTROLS AND COMPONENTS

Also Process Control Computers,
Automatic Data Logging and Control Systems
for Industry and Government

Write for additional Information

Librascope's use of the LGP-30 computer simplifies complex design and production problems, and assures computer-engineered quality in meeting delivery schedules.

LIBRASCOPE

GPE GENERAL PRECISION CORPORATION

A SUBSIDIARY OF GENERAL PRECISION EQUIPMENT CORPORATION

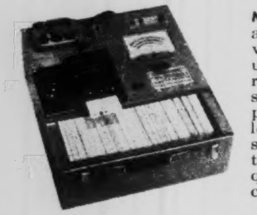
LIBRASCOPE, INCORPORATED · 808 WESTERN AVENUE · GLENDALE, CALIFORNIA

For more information circle 3 on inquiry card.

RD INSTRUMENTS

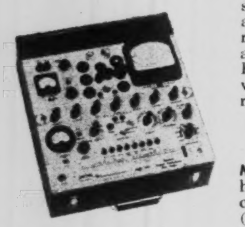
FOR RESEARCH AND DEVELOPMENT

TUBE TESTERS



AUTOMATIC—CARDMATIC

MODEL 1230—Card programmed to automatically set-up predetermined voltages and conditions for each tube under test. Self-calibrating and accurate within 1 to 3% of best known standards for transconductance and plate current measurements. Reject levels set in accordance with military specs. Also permits special purpose tube tests to meet specific circuit requirements. Portable style with cover.



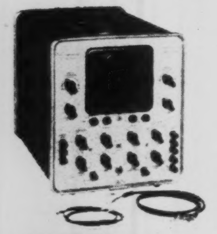
FIELD SERVICE STANDARD

MODEL 1575—Meets Western Electric specifications as a Mutual Conductance tester. 0-60,000 micromhos in 7 ranges. Two separate meters for line and grid bias voltage indications. Has 4 signal voltages. Features new, voltage regulator tube test. Built-in roll chart. Portable style with cover.

RESEARCH LABORATORY MODEL (Not Illustrated)

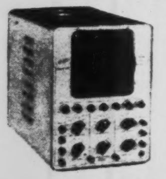
MODEL 1700—For tube tests under handbook conditions. All voltages and currents are variable and metered (9 meters). 0-60,000 micromhos in 8 ranges. Electronically regulated and metered power supplies.

OSCILLOSCOPES



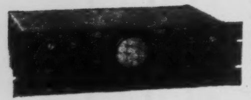
WIDE RANGE—VERSATILE

MODEL 1810—5″ flat face, post accelerated CRT and illuminated, calibrated screen. 4 mc band vertical amplifier. 10 millivolts peak-to-peak per cm sensitivity. Triggered or recurrent sweeps—variable from 2 cps to 30 kc. Built-in, direct reading, regulated square wave voltage calibrator. AC or DC vertical amplifier inputs.



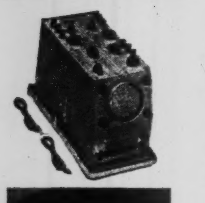
INDUSTRIAL'S 5″ PORTABLE

MODEL 685—Features identical amplifiers DC to 750 kc—1 cps to 750 kc. 0.5 microseconds rise time. Sensitivity—20 millivolts RMS vertical (30 horizontal). Recurrent or triggered sweep. Covers 1 cps to 10 kc in 5 calibrated decade ranges with vernier control of 10 to 1. External sync for triggering and synchronizing the built-in sweep generator.



3″ RACK MOUNT

MODEL 387R—Identical horizontal and vertical amplifiers. Triggered or recurrent sweeps from 1 cps to 100 kc. Slow sweeps (10 seconds or more) with external capacitors. 10 millivolts RMS per inch vertical sensitivity (14 horizontal).



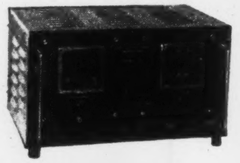
3″ PORTABLE

MODEL 385 CSM—Rugged lightweight designed for field service. Features unitized circuit modules. DC amplifiers (horizontal and vertical) with frequency coverage to 4 mc at .075 RMS volts per inch. 2 MC bandwidth has roll-off per IRE standard. Telescopic light shield and shock mounted carrying case.

CARD PROGRAMMED SWITCH

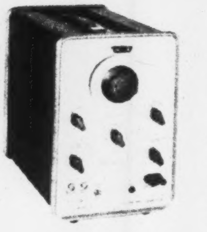
Cardmatic automatic or manual multiple switch provides up to 10-trillion variables. Self-cleaning, wiping type contacts rated .00025 ohms nominal (contact-to-pin), current rating is 10 amperes. Prox. 7″ x 7½″ x 4½″ D.

GENERATORS



SINE WAVE—SQUARE WAVE

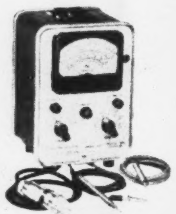
MODEL 710—Both sine and square wave outputs in one generator with wide frequency range (20 cps to 1 megacycle in 5 ranges). Sine wave total harmonic distortion below 1%. Hum level better than 90 db down. Square wave rise time less than 0.1 microsecond. Portable—easily adapted to rack mount.



SQUARE WAVE

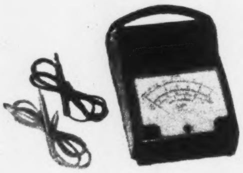
MODEL 1715—Wide frequency range of 1 cps to 1 megacycle, continuous in 6 decade bands with constantly variable frequency available throughout the entire range. Rise time is 0.02 microseconds. Consistent output level is independent of frequency setting. Electronic regulation of power supply. Includes symmetry control and provision for external synchronization.

VACUUM TUBE VOLTMETERS



HIGH FREQUENCY MODEL

MODEL 1600—Accurately indicates AC voltages from .05 to 300 volts in frequencies from 20 cps to 700 mc (up to 3000 mc are possible). Includes special thermionic diode probe. Excellent plus or minus DC volts, readability from .05 to 1000 volts. 7-range ohmmeter with practical readability from 0.2 ohm to 1000 megohms. Power supply built-in. Has 1% meter.



SMALL SIZE VOM

MODEL 456—Has full-wave bridge type rectifier circuit. Features a patented automatic (button-reset) overload protection system to hold meter and associated circuits from damage due to accidental overload. 0-1200 AC or DC volts in 6 ranges. Sensitivity—20,000 ohms per volt DC (1000 AC). Resistance—0 to 100 megohms. 5 db ranges (−18 to +57).

HICKOK-DAWE INSTRUMENTS

True RMS-VTVM—300 microvolts to 300 volts, 5 cps to 500 kc.

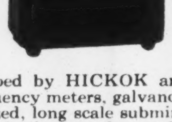
Stroboscopes—3 models with wide ranges.

Sound Level Indicators—Portable and laboratory types.

Balancing Machine—For rotating parts (4 oz. to 10 lbs.).

HICKOK METERS

Accurate DC and AC Portables



Ammeters, milliammeters, microammeters, voltmeters, millivoltmeters, volt-ammeters, thermometers. Shielded. Accuracy within ½ of 1%—available to 2/10 of 1%.

PANEL METERS

A complete panel meter line is available in numerous types, styles and ranges to meet every specification. The many special movements developed by HICKOK are: Electrodynamometers, self-contained frequency meters, galvanometers, true logarithmic deflections, ruggedized, long scale subminiatures, and taut-band suspensions with sensitivities to as low as ½ of 1 microampere.

THE HICKOK ELECTRICAL INSTRUMENT CO.

10514 DUPONT AVENUE
CLEVELAND 8, OHIO

For more information circle 4 on inquiry card.

HIGHer reliability... LOWer maintenance

NC NORWOOD CONTROLS

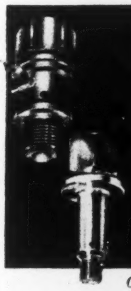
For process control . . .

ELECTROSYN SYSTEM

• pressure • differential pressure • flow • level • temperature

ElectroSyn is a highly flexible, extremely rugged electromagnetic system for a wide range of applications in the chemical processing, atomic power, natural gas, and petroleum transmission fields. It is designed to measure, indicate, record (including analog to digital conversions), or control a wide range of process variables. Basic system consists of signal transmitter, magnetic servo amplifier, null-balance indicator. (No electron tubes or slide wires.)

For precision testing and evaluation . . .



High Temperature Adapters

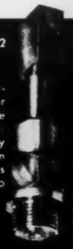
For use with Norwood Controls EP air-cooled Transducers where temperature of the pressure medium is between 250°F and 600°F, such as in extruding and molding processes. Suitable for pressures up to 10,000 psi.

Model 104 Pressure Transducer

For high pressure applications in blast analyses, gun barrel pressures, hydraulic high pressures, etc. Frequency response: flat from 0-20,000 cps. Pressure ranges: 0-20,000 up to 0-60,000 psi.

Models 101 and 102 Pressure Transducers

Highly accurate, versatile transducers for dynamic pressure measurements requiring high frequency response (flat from 0-20,000 cps). Ranges from 0-100 up to 15,000 psi.



Model 107 Pressure Transducer

Water-cooled, high frequency transducer for pressure studies under very high temperatures. Can be exposed to gas temperatures above 5000°F without damage. All welded construction for any applications, including highly corrosive liquids and propellants. Pressure ranges: 0-1,000, 2,000 and 5,000 psi.

Models 105 and 106 Low Pressure Transducers

For pressure ranges 0-25 and 0-50 psig. Utilize same strain tube assembly as models above. May be used under conditions of extreme vibration as encountered in measuring shock waves in open air.

Complete technical information available upon request

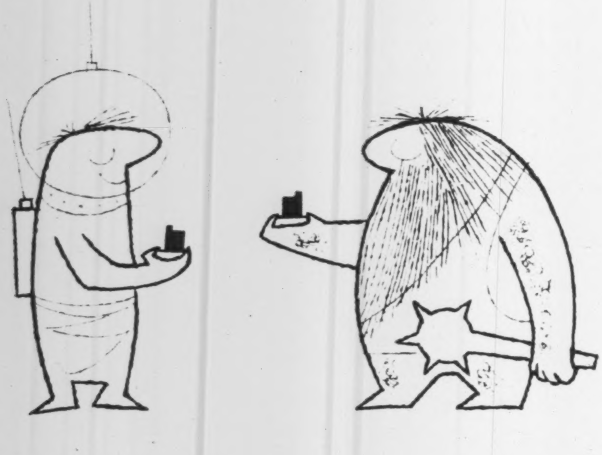
NC NORWOOD CONTROLS

NORWOOD CONTROLS UNIT
DETROIT CONTROLS
Division of AMERICAN-Standard
937 Washington Street, • Norwood, Mass.

DETROIT CONTROLS PRODUCTS

For more information circle **5** on inquiry card.

which one knows what the little box is for?



You know, because you, like the little black box, are of and for the Space Age. It's a miniature high-speed commutator which will operate practically forever, sampling up to 30 low-level ac or dc inputs at speeds up to 2500 samples per second. Weighing considerably less than a pound and occupying less than 30 cubic inches, this new achievement of the Wiancko Engineering Company is ideal for telemetering applications under severe environmental conditions. High, accurate output, extremely long life and reliability, cascading capability, and a great variety of switch speeds are all inherent characteristics of this small package. The Wiancko reputation for reliability and accuracy is combined in this little box with some pretty advanced engineering

Of course, you knew this all along, but if you'd like to know more, there is a brand new Bulletin, Number 103, that is yours for the asking.

Miniature
High-Speed Commutator

WIANCKO ENGINEERING COMPANY
255 North Halstead Avenue, Pasadena, California

wiancko

Field Offices:

- **Eastern**
  No. 2 South Maple Ave.
  Ridgewood, New Jersey
  Phone: GIlbert 4-2444
- **Northern California**
  Cowper-Hamilton Bldg.
  Palo Alto, California
  Phone: DAvenport 6-7053
- **Southern California**
  3410 E. Foothill Blvd.
  Pasadena, California
  Phone: ELgin 5-7186

For more information circle 6 on inquiry card.

THE 1959 I&A BUYERS' GUIDE

Part Two of the Two-part October 1958 issue of Instruments and Automation

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2. *Directory of Manufacturers and sole representatives*, with complete addresses and brief descriptions. *Pages 227 to 278.*

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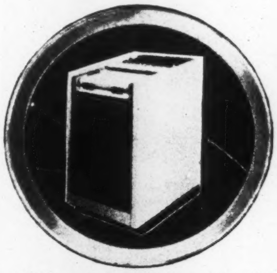
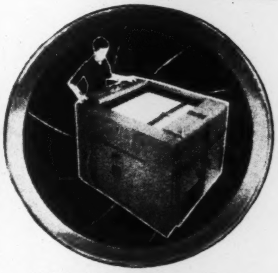
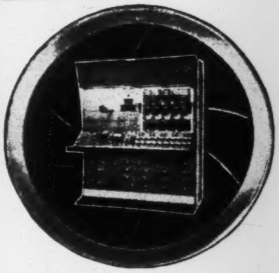
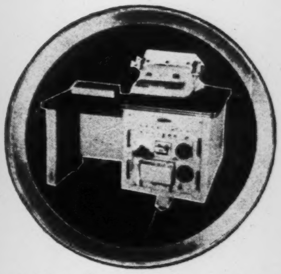
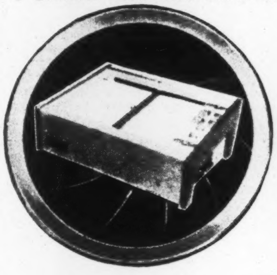
ELECTRONIC
ASSOCIATES
Incorporated

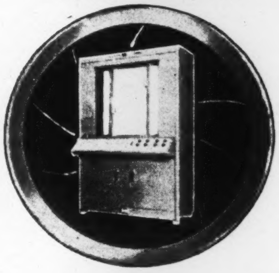

8 Channel Rectilinear Recorder


Dataplotter—Line plotter


231 R Analog Computer


Analog Computer Automatic Digital Input-Output System


1100D or E Variplotter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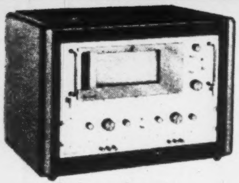
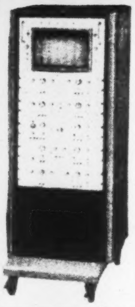
For more information circle **7** on inquiry card.

brush ULTRALINEAR RECORDING SYSTEMS

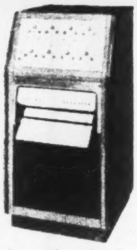
Whatever you want to measure, only Brush gives you freedom of choice: ink, electric or thermal writing—curvilinear or rectilinear trace presentation—configuration. Available in 2, 4, 6 or 8 channels.



2 channel carrier multi-purpose, accepts either resistive or inductive inputs.



6 channel high gain records signals as low as 10 microvolts.



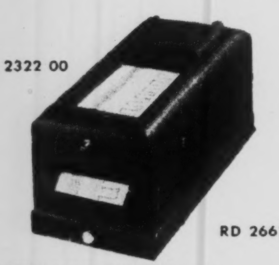
8 channel medium gain wide input range, 10 millivolts to 400v.

Select your OSCILLOGRAPHS

Frequency response	D.C. to 100 cps with Brush amplifiers.
Writing methods	Ink, electric curvilinear, or thermal rectilinear.
Chart speeds	Instantaneous electric selection of up to 16 speeds, remote or on-the-spot control.
Chart take-up	External or internal, easy loading.
Mounting	Rack-mounted, cart-mounted, portable and bench-top models.
Reliability	Readily adaptable to MIL specifications.

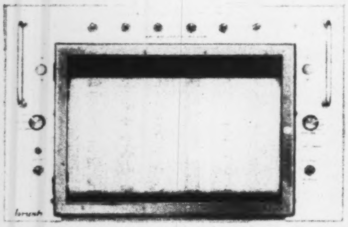
ENCLOSURES	CHANNELS	WRITING METHOD & WRITING PLANE	MODEL NO.
PORTABLES	2	ink, horizontal	RD 2321 00
	2	ink-electric, horizontal	RD 2322 00
	4	ink, horizontal	RD 2341 00
	4	ink-electric, horizontal	RD 2342 00
	6	ink, horizontal	RD 2361 00
	6	ink-electric, horizontal	RD 2362 00
RACK, CONSOLE CABINET OR CART MOUNTED	2	ink-electric, vertical	RD 2622 00
	2	ink-electric, horizontal	RD 2722 00
	4	ink, vertical	RD 2641 00
	4	ink-electric, vertical	RD 2642 00
	4	thermal, vertical	RD 2644 00
	6	ink, vertical	RD 2661 00
	6	ink-electric, vertical	RD 2662 00
	6	thermal, vertical	RD 2664 00
	6	thermal, horizontal	RD 2664 50
	8	ink-electric, vertical	RD 2682 00
	8	thermal, horizontal	RD 2684 50
CART AND BENCH TOP	6	thermal, horizontal	RD 2764 00
	8	thermal, horizontal	RD 2784 00

RD 2322 00



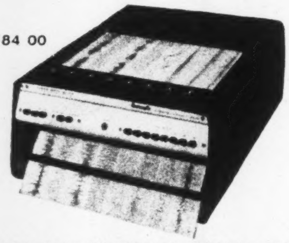
RD 2662 00

PORTABLE OSCILLOGRAPHS in 2, 4 and 6 channels



RACK MOUNTING OSCILLOGRAPHS in 2, 4, 6 and 8 channels

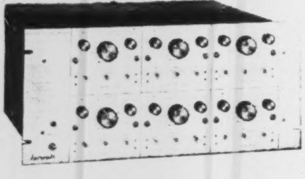
RD 2784 00



CART OR BENCH TOP OSCILLOGRAPHS in 6 or 8 channels

Select your AMPLIFIERS

single and two channel configuration for standard 19″ rack mounting.



six and eight channel configuration for standard 19″ rack.

	SINGLE CHANNEL
UNIVERSAL Model RD 5612 00	multi-purpose carrier type for wide range of measurements. Input box RA 5212 00 for resistive transducers, RA 5222 00 for LVDT's.
HIGH GAIN D. C. Model RD 5615 00	chopper stabilized, amplifies signals as low as 100 microvolts; RD 5615 10 amplifies signals as low as 10 microvolts.
SERVO ANALYZER Model RD 5616 00	monitors any servo system in carrier frequency range of 50 to 10,000 cps.

MEDIUM GAIN		TWO CHANNEL	
Model No.	Sensitivity	Drift	Power Line Frequency
RD 5621 00	10 mv/line (mm)	less than ½ line (mm) per hr., 1 line 8 hrs.	60 cps, ± ½ cps
RD 5621 01	10 mv/line (mm)	less than ½ line (mm) per hr., 1 line 8 hrs.	50-2000 cps
RD 5621 02	50 mv/line (mm)	less than 1/10 line (mm) per hr., ¼ line 8 hrs.	50-2000 cps

MEDIUM GAIN	SIX AND EIGHT CHANNEL
Basic Pen Drive Amplifier System Model RA 5680 00 includes chassis and separate electronic regulated power supply with capacity to operate up to 8 plug-in pen drive amplifiers.	
Plug-in Model RD 5211 03	sensitivity 10 mv/line (mm), less than ½ line (mm) per hr. drift, 1 line 8 hrs., power req. 50-2000 cps.
Plug-in Model RD 5211 04	sensitivity 50 mv/line (mm), less than 1/10 line (mm) per hr. drift, ¼ line 8 hrs., power req. 50-2000 cps.

For more information circle **8** on inquiry card.

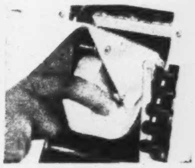
brush ULTRALINEAR RECORDING SYSTEMS

MARK II RECORDER

Completely self-contained recorder, plugs in anywhere for easy recording of electrical and physical phenomena, d.c. to 100 cps . . . in research . . . design and development . . . production . . . servicing . . . field test and installation.

Sensitivity	10 mv/line (mm). Full scale deflection from chart center ± 200 mv.
Measurement range	.010v. to 400v.
Input impedance	5 megohm single-ended, 10 megohm balanced.
Event channels	2, 12v. internal power source actuated by external signal.
Chart speeds	1, 5, 25, 125 mm/sec.
Power requirements	105-125v., 60 cps. 135 watts at 115v.
Net weight	32 pounds.

RD 2521 00



Convenient operation: fast paper loading without threading, pushbutton controls for 4 chart speeds.

Complete recorder with built-in, permanently calibrated amplifiers.

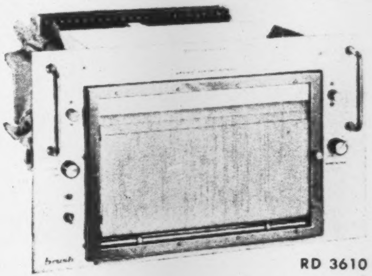
Trouble-free writing system features self-cleaning, self-priming, rugged pens, extra-large ink reservoir.

EVENT RECORDER

Simplifies complex checkouts . . . monitors 100 channels of data simultaneously.

Simultaneously records 100 channels of sequential or operational information. On-off input data presented provides a record of events, their duration, and their time relationship to each other. Electric writing styli record in less than one millisecond after receiving a signal—handle up to 500 signal changes per second. Remote or on-site chart speed control.

Available in two models, the RE 3610 00 or: Military Model RE 3610 02 which fully complies with MIL-E-4158 A.

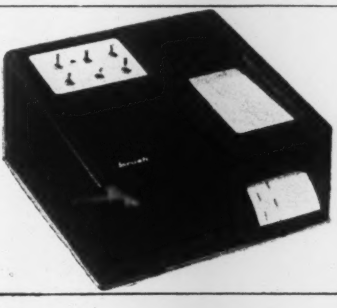


RD 3610 00

Writing method	Electric — instantaneous, dry and permanent.
Capacity	100 easy-to-identify channels. Records on preprinted chart paper, 12″ wide, 500′ long.
Chart speeds	Instantaneous electric selection of 8 chart speeds, on-site or remote control.
Chart take-up	Provision for both internal chart take-up of entire roll, or external feed.
Mounting	Mounts in standard 19″ rack.

HIGH SPEED RECORDER

Two channel recorder gives accurate easy-to-read measurements that defy interpretation at conventional chart speeds. Gives precise time correlation between two rapidly changing phenomena on adjacent channels. Has two super chart speeds: 625 mm/sec. and 1250 mm/sec. Three conventional speeds of 5, 25, 125 mm/sec.



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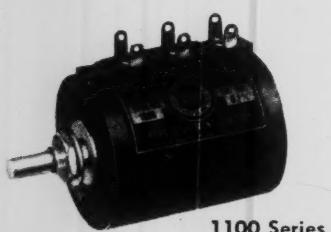

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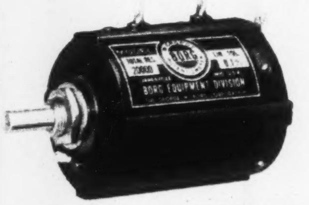

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. . . 0.2% on A. C. & D. C. for technical frequencies.

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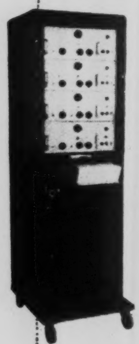
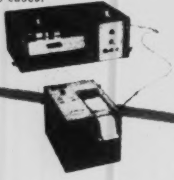
1- TO 8-CHANNELS, 12 PLUG-IN PREAMPLIFIERS

150 SERIES

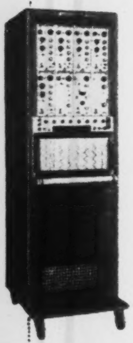


Features of the "150 series" direct writers include frequency response to 100 cps; linearity 1% overall; inkless recording in true rectangular coordinates by heated stylus on plastic coated Permapaper charts; current feedback driver amplifier and regulated power supply for each channel. Recorder has 9 chart speeds, 0.25 to 100 mm/sec; individual stylus heat controls, time-code marker. Up to 6-channels can be housed in one vertical cabinet. Amplifiers, recorder also available in individual portable cases.



6-, 8-CHANNELS, FLUSH FRONT RECORDER, FREQUENCY RESPONSE TO 120 CPS

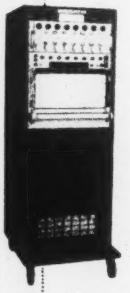
350 SERIES



New "350" series direct writers with compact plug-in preamps in modules of up to 4; individual power supplies; current feedback transistorized power amplifiers, limiter circuit ahead of power amplifiers; velocity feedback galvanometer damping; enclosed galvanometers. Linearity 0.2 div. over entire 50 divisions. Recorder-power amplifier-power supply package has 0.1 volt/div. sensitivity, can be used separately, pushbutton controls for 9 chart speeds 0.25 to 100 mm/sec; individual stylus heat controls, contacts for remote control, inkless rectangular coordinate recording on Permapaper charts.

6-, 8 CHANNELS

850 SERIES



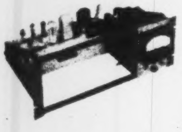
Compact "850" series direct writers use 7" high plug-in preamplifiers in modules of up to eight and "350" flush front recorder package with transistorized power amplifiers, power supply, features velocity feedback galvanometer damping, linearity 0.2 div. over entire 50 divisions, 9 chart speeds from 0.25 to 100 mm/sec controlled by electric pushbuttons; inkless recordings on Permapaper charts. Available preamps include Servo Monitor (demodulator) and DC Coupling Carrier, Chopper Stabilized and Low Level types are in development.

COMPUTER READOUT . . . AUTOMATIC PROGRAMMING

150 SERIES

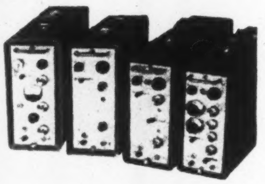
"150 series" 6-, 8-channel consoles in 46½" high mobile cabinet. Dual-Channel Amplifiers have selectable sensitivity from 0.01 to 10 volts/div.; internal calibration 2 volts ±1% freq. response flat to 20 cps. Optional Programmer sequences system operation in 20 steps, including recorder turn-on, calibration, computer DC level reading, recording for pre-set time, turn-off and reset.

PORTABLE INDICATORS FOR STRAIN, ETC.



Model 150-300/700 Wide Band Amplifier and Power Supply accepts "150" series preamplifiers — for use with low power galvanometers, oscilloscopes, panel meter. Freq. range DC to 10,000 cps (but limited by particular preamp range). Panel meter has center zero scale, 25 divisions each side of center.

SELF-CONTAINED UNIT PREAMPLIFIERS
TO DRIVE 'SCOPES,
OPTICAL OSCILLOGRAPHS,
TAPE RECORDERS, ETC.



Portable "350" series include Carrier, DC Coupling Servo Monitor (demodulator), True Differential DC types; others in development. Mount in portable "450" cases or in four-unit modules in 19" frame. Use individual power supplies. One "450" case and power supply can serve any "350" Preamp.

(ALL DATA SUBJECT TO CHANGE WITHOUT NOTICE)

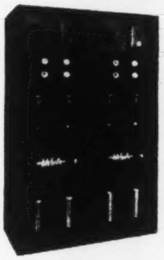
For complete data, call your local Sanborn Engineering Representative or write the Industrial Division in Waltham.

SANBORN COMPANY
Industrial Division
175 Wyman Street, Waltham 54, Mass.

For more information circle **12** on inquiry card.

M-S-A (LIRA) Infrared Analyzer (Model 200)

Low-cost deflection type unit for automatic, continuous, high speed, accurate analysis. Detects one component in a simple or complex mixture of gases or liquids. Unitized construction makes maintenance easy. All controls readily accessible on front panel. Write for details.

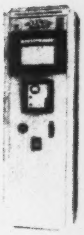


M-S-A Carbon Monoxide Analyzer

Single or multipoint cabinets designed as alarms or recorders are available for detecting or measuring low concentrations of carbon monoxide in air. Measurements are based upon measurement of heat of oxidation when sample is drawn through granular catalyst. Write for details.

M-S-A Combustible Gas Analyzer

Adaptable for use with any gas or vapor of which the explosive range, and molecular weight are known. Applications extend to all industries where combustible fluids are employed. Now available with remote filament heads specifically adapted to high temperature applications. Write for details.



M-S-A Gas Thermatron

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M-S-A Oxygen Indicator

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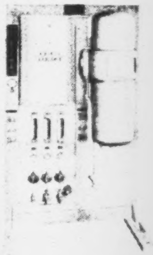

M-S-A Water Vapor Recorder

Detects trace moisture in air or gas streams. Operation is based on measurement of the heat energy exchanged when a gas is adsorbed on or desorbed from the surface of a solid adsorbent. Can be calibrated for various ranges from 0 to 10 parts per million up to several percent. Write for details.

This line-up of M-S-A® Gas Analyzers can help solve your process stream problems

M-S-A Gas Analyzers have earned a sound reputation for on-stream accuracy and dependability while solving a myriad of complex control problems. Chances are, some of the problems confronting you now have already been solved for others, with one of the basic units described above.

The experience and service we can bring into play may provide the breakthrough you're looking for in successful process stream control. Our thirty years in the business of gas analysis instrumentation are worthy of your consideration. Get in touch with an MSA Instrument Specialist for details, or write for helpful literature.

MSA

INSTRUMENT DIVISION

MINE SAFETY APPLIANCES COMPANY

Pittsburgh 8, Pennsylvania

At your service: 76 Branch Offices in the United States

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Small size

Reduced cost

Long life

Friction reduction

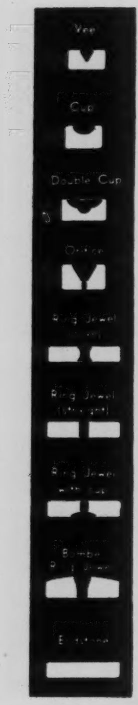
Corrosion resistance

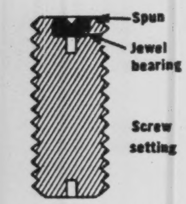
Dry operation

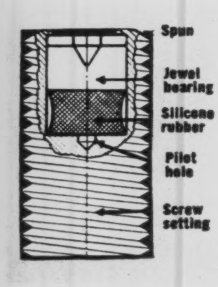
Non-magnetic material

7 BIG REASONS WHY Bird PRECISION JEWEL BEARINGS MEAN BETTER INSTRUMENT PERFORMANCE

Whether you are making missiles for outer space or monitoring earth-bound processes, today's instruments must pack greater reliability in smaller spaces. In miniaturized apparatus such as this, Bird Sapphire and Glass Jewel Bearings show their unique advantages . . . operation without lubrication through great temperature extremes . . . resistance to corrosive fumes and liquids . . . adaptability to many mounting arrangements. When compared with other types of bearings Bird Jewels are substantially more economical and their long life expectancy eliminates maintenance problems.







BIRD COMPLETE JEWEL ASSEMBLIES

Special mounting techniques provide assemblies to exact tolerances, in screws or bushings of any style ready for assembly in your product. Complete assemblies save time and money, cut rejects, keep production flowing smoothly.

BIRD CUSHION JEWEL ASSEMBLIES ADD SHOCK PROTECTION

Bird jewels mounted with resilient silicone rubber or spring cushions provide inexpensive shock resistance for any instrument. Variable cushioning to suit different operating conditions; mountings of any style; controlled movement of jewel; elimination of waste and tear-down because of poor judgment in bearing adjustment – actual tests prove these advantages can be incorporated into your instruments for only pennies more by using Cushion Jewel Assemblies.

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When ordering glass and sapphire jewels it is advantageous to use "stock" sizes where possible for greatest economy. However, if these sizes do not meet your needs, a simple sketch incorporating pertinent specifications will enable the Bird engineering staff to provide prompt quotations and delivery. The engineering staff of the Bird Company is at your service for all small bearing problems.

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contains a complete description of properties and uses of jewel bearings for aircraft, electrical and timing instruments; recorders and indicating apparatus. Write for your copy today.

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ROBOTEC®
PROTECTED
TRANSISTORIZED POWER SUPPLIES
featuring
HEATRAN®

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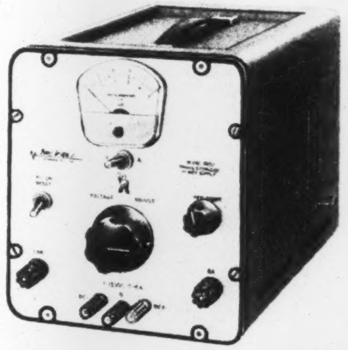
1-15 VDC, 0-1.5 Amps.
Regulation: .05 %
Ripple: 250 Microvolts
Internal Imp.: .01 ohms
$159.50

ROBOTEC® is an inherent electronic circuit
Producing
SIMULTANEOUS CURRENT & VOLTAGE CUTOFF
UPON EXTERNAL SHORT CIRCUIT

HEATRAN is a transistorized electronic circuit continuously monitoring dissipation in the power transistors of the regulator system and automatically transferring dissipation above a preset maximum value into external vitreous enamel resistors. These resistors are mounted in a cage at the rear of the cabinet. "Heatran" thus permits fewer transistors for a given power supply capacity, more compact equipment with increased reliability and practical convection cooling.

* U.S. Patent Applied For



MODEL 2050
1-20 VDC, 0-5.0 Amps.
Regulation: .05 %
Ripple: 1.0 Millivolts
Internal Imp.: .005 Ohms
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INPUT: 105-125 volts,
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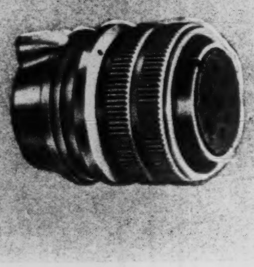

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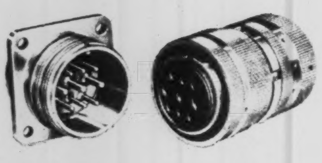
SHORT MS "E"

Smallest, lightest MS "E" types. Unitized rear sealing grommet. Pre-filled solder pockets.



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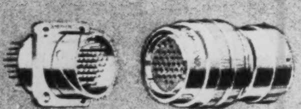
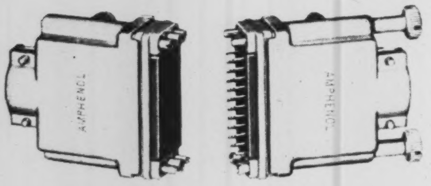


MINNI E

MINIATURE "E"

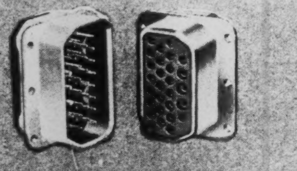
Altitude-moisture resistant. Stainless steel pins and bayonet slots. 257°F.



93 SERIES

RACK & PANEL

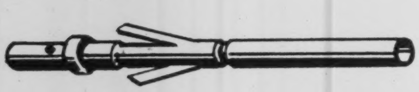
Complete connector family. Crimp termination "Poke Home" contacts +200°C.



94 SERIES

RACK & PANEL

Polarized aluminum shells. "Poke Home" contacts. Up to 63 contacts. +257°F.



AMPHENOL "POKE HOME" CONTACT CONCEPT IS COVERED BY:
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AMPHENOL

AMPHENOL ELECTRONICS CORPORATION
chicago 50, illinois

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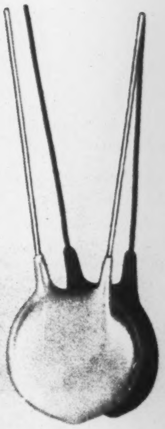
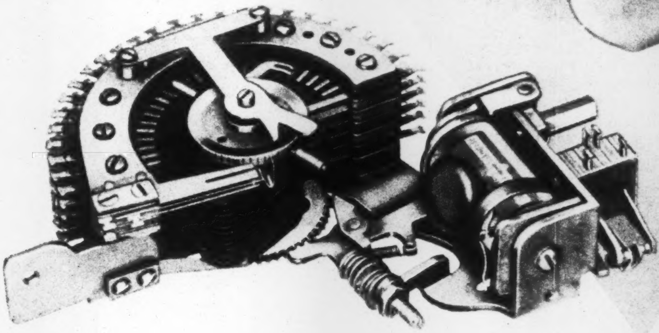
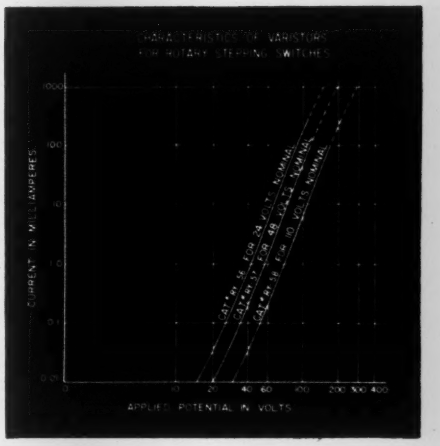
Built-in arc suppression



now available on
A. E. Rotary Stepping Switches




CHARACTERISTICS OF VARISTORS
FOR ROTARY STEPPING SWITCHES
CURRENT IN MILLIAMPERES
1000
100
10
1.0
0.1
0.01
0
10
20
40
60
100
200
300
400
APPLIED POTENTIAL IN VOLTS
CAT# RY-56 FOR 24 VOLTS NOMINAL
CAT# RY-57 FOR 48 VOLTS NOMINAL
CAT# RY-58 FOR 110 VOLTS NOMINAL

Automatic Electric's Type 44 and 45 switches and Series OCS relays operating on 24 to 110 volts, d.c., can now be ordered with arc suppression **built-in.** The tiny A.E. varistor (shown actual size) mounts directly on the switch. It is less expensive (and more reliable) than common capacitor-resistor arc suppressors.

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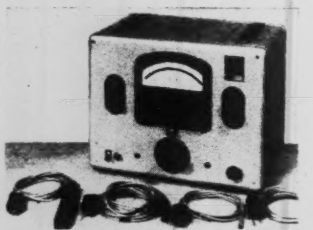

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An extremely sensitive eddy current measuring instrument for DC magnetic fields. Used for many applications in geophysics, magnetic investigations, military use and in nondestructive testing of magnetic materials. Responds to steady state fields and the field of direct current. Measures weak fields in presence of stray fields and determines amount of residual field remaining in a piece after demagnetization.

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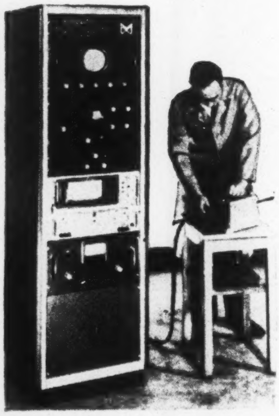
Detects seams, cracks, concentrated porosity, inclusions, stringers, laps and splits automatically. Finds diameter variation, embrittled areas and scale. Provides completely automatic, high speed production of copper tubing. Inspects aluminum rod for voids, scale and other conditions which cause trouble in drawing or final wire. Designed for heavy industrial use.



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The most used method on magnetic metals, for surface and sub-surface defects. Highest production speeds, controlled sensitivity. Biggest to smallest units, including portable and hand type.

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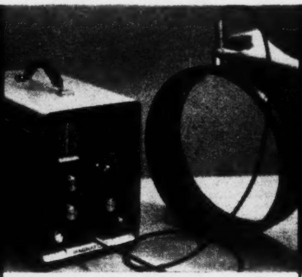
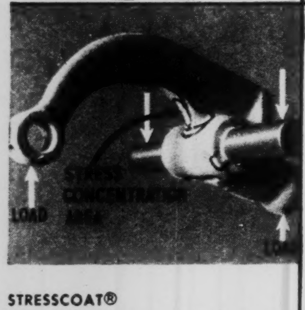


SONIZON®

Ultrasonically measures thickness from one side only in tank walls, cast, formed or welded products, etc. Also discovers sub-surface defects, laminations and lack of bond.

MAGNATEST®

Electronic eddy current instruments. Numerous types with industry-wide application. Conductivity, magnetic fields, dimension, hardness, alloy, coating thickness, cracks, etc.



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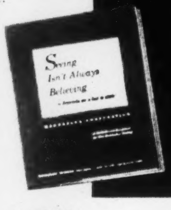

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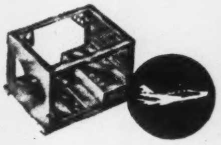
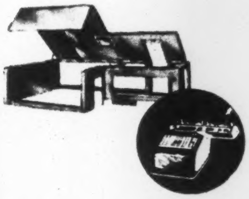
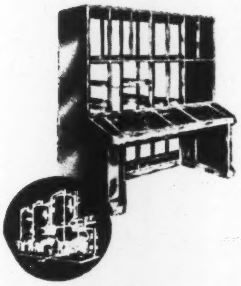
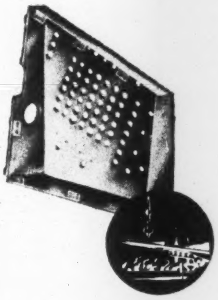
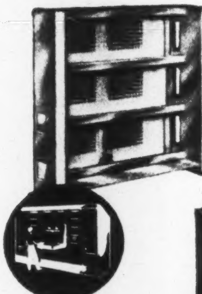






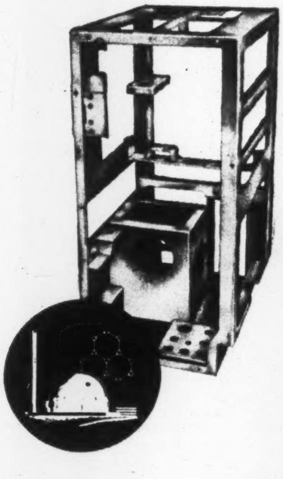
FALSTROM ENCLOSURES FOR EVERY ELECTRONIC INDUSTRY





Falstrom's experience in working metals can help you create the enclosures you need for your instruments, controls, equipment or machinery. Whether you require a complete control room with color-coded graphic panelboards, or a simple chassis, Falstrom facilities and skilled personnel can help you achieve better design and more economical production.

Falstrom metal fabrications — consoles, racks, chassis, weldments, panelboards, enclosures, — are in service throughout American industry. They are produced to customer specifications in steel, aluminum, magnesium, stainless and other metals.



The STANDARDized Line

Falstrom now also offers a line of standardized units that cost less because they are fabricated from stock tools and dies. These units are not shipped from stock but are adapted to the special requirements of the equipment housed. Write today for FREE booklet "How To Get Your Quotation on a Falstrom Standardized Enclosure".

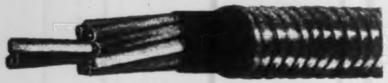
Submit prints for quotation or ask for literature.

FALSTROM COMPANY
165 Falstrom Court
Passaic, N. J.
PRescott 7-0013

For more information circle **19** on inquiry card.

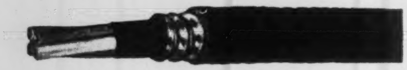
CRESCENT ARMORED MULTITUBE

—an armored group of 2 to 37 long length tubes of the user's choice, SPIRALLY CABLED together to permit maximum bending without distortion of the tubes. Mechanical and corrosion protection is accomplished by a flexible, interlocked, metallic armor or corrosion-resistant polyvinyl chloride sheath, or combination of both. There is a type of MULTITUBE to meet your requirements and give you the best protected instrument and control tubing installation at the lowest installed cost. We are able to provide your type promptly from large factory stocks of tubing.



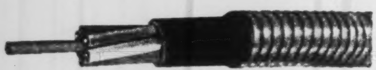
TYPE CA
(General Purpose)

employs SPIRALLY CABLED copper tubes covered with a vinyl insulating tape and flexible, interlocked, galvanized steel armor.



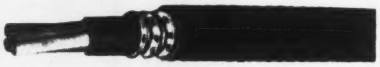
TYPE CAT

has a vinyl insulating tape over the SPIRALLY CABLED copper tubes with a flexible, interlocked, galvanized steel armor and polyvinyl chloride (PVC) thermoplastic sheath. This construction provides mechanical and corrosion protection for the tubing as well as corrosion protection for the armor. For outdoor, wet and corrosive locations.



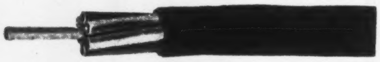
TYPE CTA

consists of SPIRALLY CABLED copper tubes with a polyvinyl chloride (PVC) thermoplastic sheath and flexible, interlocked, galvanized steel armor. The sheath protects the tubing against corrosion and the armor protects both tubing and sheath from mechanical injury. Recommended for general outdoor use and when a high degree of mechanical protection is desired for exposed locations or during installation such as direct burial in concrete or blacktop and pulling into conduit.



TYPE CTAT

provides maximum mechanical and corrosion protection. It has a polyvinyl chloride (PVC) thermoplastic sheath over the SPIRALLY CABLED copper tubes, with a flexible, interlocked, galvanized steel armor and polyvinyl chloride (PVC) thermoplastic sheath overall. For particularly corrosive locations as in refineries and petrochemical plants.



TYPE CT

The SPIRALLY CABLED copper tubes are protected by a polyvinyl chloride (PVC) thermoplastic sheath that is tough, resistant to water, acids, alkalies, oils and most chemicals and will not support combustion. Recommended for use in damp or corrosive locations, in troughs or attached to sheltered building surfaces where it will not be subjected to mechanical injury.

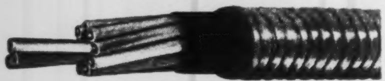
CRESCENT PLASTIC COATED SINGLE TUBE

For the individual connecting lines in a corrosion-protected system use CRESCENT PLASTIC COATED SINGLE TUBE. Copper or Aluminum tubing is protected from corrosion with the same tough, flame-retarding polyvinyl chloride (PVC) thermoplastic sheath as used on MULTITUBE.

CRESCENT POLYETHYLENE MULTITUBE

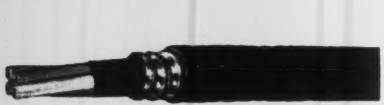
consists of 2 to 37 precision Polyethylene tubes *spirally cabled* together for greatest flexibility. The tubing assembly is protected against mechanical injury by an interlocked, galvanized steel armor, Polyvinyl Chloride sheath, or other sheaths, as below.

STANDARD TYPES



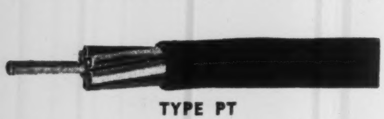
TYPE PA

TYPE PA—Interlocked metallic armor provides complete mechanical protection.



TYPE PAT

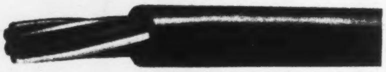
TYPE PAT—Polyvinyl chloride sheath over the armor adds corrosion protection for the armor. Can be buried in the earth.



TYPE PT

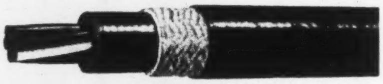
TYPE PT—PVC sheath gives limited mechanical protection. For use in troughs, trays or conduit.

SPECIAL SERVICE TYPES



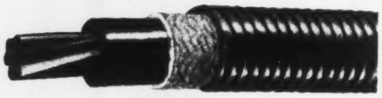
TYPE XPT-U

TYPE XPT-U—Extra heavy PVC sheath over high modulus TYPE XP tubing permits direct burial, or use above ground where subject to moderate abuse.



TYPE XPT-F

TYPE XPT-F—Same as XPT-U with heavy asbestos braid and outer PVC sheath. Provides time delay in event of flash fire.



TYPE XPT-FA

TYPE XPT-FA—Same as XPT-U with heavy asbestos braid and interlocked metallic armor. Provides complete mechanical protection, as well as time delay in event of flash fire.

WRITE FOR BULLETIN NO. 458-J

CRESCENT INSULATED WIRE & CABLE CO. INC.

TRENTON, NEW JERSEY

For more information circle **20** on inquiry card.

ESSENTIAL ELECTRONIC PRODUCTS

AMERICAN PLATINUM & SILVER DIVISION

231 N. J. Railroad Ave., Newark 5, N. J.
Silva-Brite® Silver Plating Process

AMERSIL QUARTZ DIVISION

685 Ramsey Ave., Hillside, N. J.
Fused Quartz and Silica
in all shapes and forms

BAKER CONTACT DIVISION

207 Grant Ave., E. Newark,
Harrison P.O., N. J.
Precious Metal Contacts,
Contact Sub-Assemblies,
Sintered Powder Metals

BAKER PLATINUM DIVISION

113 Astor St., Newark 2, N. J.
Fine Wire, Platinum Clad Tungsten Wire,
Composite Wire and Sheet

CHEMICAL DIVISION

113 Astor St., Newark 2, N. J.
Atomex® Immersion 24K Gold Solution,
Deoxo® Puridryer, Deoxo® Purifier,
Deoxo® Indicator, Minoxo® Indicator,
Nitroneal® Gas Generator,
Rhodium Plating Solution

D. E. MAKEPEACE DIVISION

Attleboro, Mass.
Slip Rings,
Slip Ring Assemblies,
Wareguide Tubing,
Precision Drawn
Wire-Spring Parts,
Channel Sections

H. A. WILSON DIVISION

U. S. Highway 22, Union, N. J.
Thermometal® Thermostatic Bi-Metal,
Composite Metals, Special Alloys,
Powdered and Sintered Metals,
Precious Metal Contacts and Contact Materials

Write for complete technical information on any of these products.

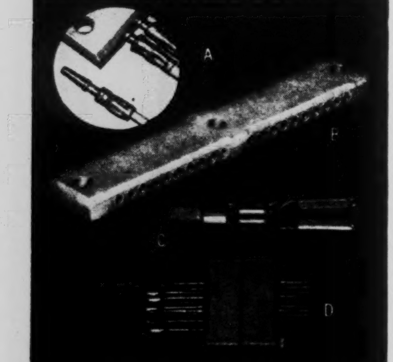
ENGELHARD INDUSTRIES, INC

113 ASTOR STREET
NEWARK 2, NEW JERSEY

For more information circle **21** on inquiry card.

FOR BETTER WIRE TERMINATING

AMP TAPER TECHNIQUE



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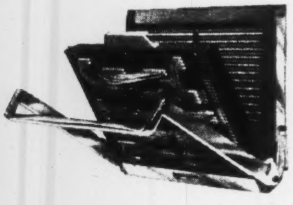
(B) **A-MP "53" SERIES TAPER BLOCKS** . . . are available in either solid blocks or two piece blocks . . . 10 or 20 cavity series . . . single or dual insert.

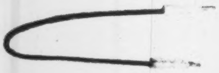
(C) **A-MP TAPER TAB RECEPTACLES** . . . accommodate flat tabs employing the taper key principle . . . feature standardized tapered section to fit relays, stepping switches, multiple connectors and other electronic components.

(D) **A-MP MINIATURE TAPER PIN RECEPTACLES** . . . eliminate tedious and costly operations of soldering leads to miniature connectors . . . use A-MP "37" Series Pins.

Bulletin Number 77

AMP PATCHBOARD TECHNIQUE





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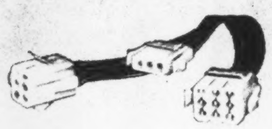
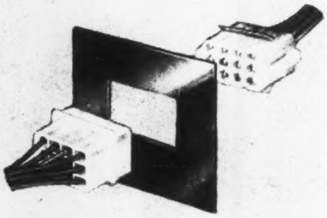
A-MP "240" SYSTEMS . . . offer complete reprogramming in seconds in airborne applications. The compact "240" System weighs 3¼ pounds and features 240 patchcord receptacles for maximum program combinations. It, too, features the exclusive wiping action to assure optimum electrical contact at all times.

Bulletin Number 58

AMP-Lok MULTIPLE CONNECTORS





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Bulletin Number 45

Information concerning any termination problem will be forwarded on request. For literature on the above products, write, giving bulletin numbers desired, to:

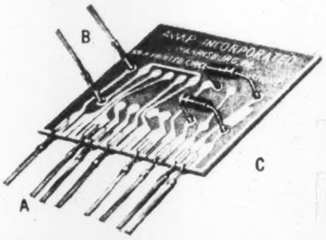
AMP INCORPORATED

GENERAL OFFICES: HARRISBURG, PENNSYLVANIA

For more information circle **22** on inquiry card.

TECHNIQUES . . . SPECIFY A-MP

PRINTED CIRCUIT TECHNIQUE



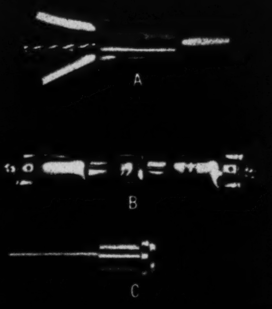
(A) AMP-EDGE TERMINALS . . . assure excellent electrical contact with friction grippage and positive wiping action . . . apply easily to any section of the perimeter of the printed circuit board . . . reduce cost of application to wire conductor and to board.

(B) **AMPin TERMINALS** . . . eliminate loose leads during solder-dip operation . . . promote good capillary action during solder dipping . . . accommodate solid or stranded conductors . . . are self retaining and self-aligning.

(C) **AMP COMPONENT TIPS** . . . prevent movement of components during solder dipping cycle . . . permit bridging or offsetting of components . . . protect semi-conductor leads from solder dipping heat . . . eliminate need for eyelets and thru-plating on two-sided boards, by excellent solder wicking characteristics and uniform solder deposit.

Bulletin Number 81

SHIELDED WIRE PRODUCTS



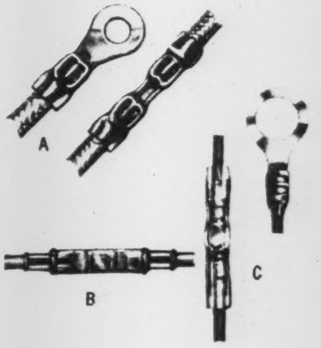
(A) **TERMASHIELD SHIELDED WIRE FERRULES** . . . assure positive grounding of wire shield . . . eliminate solder, danger of burning insulation and uncertain attachment . . . feature one-piece construction . . . accommodate one or more grounding wires.

(B) **TERMASHIELD SHIELDED WIRE SPLICES** join sections of shielded wire so that both the inner conductors and outer shields are firmly spliced, with the two effectively insulated. They eliminate multi-stage assembly or soldering . . . color coded for matchmating with application tooling and wire sizes.

(C) **TERMASHIELD 7MM SHIELDED CABLE FERRULES** . . . permanently ground shielded high tension cables . . . prevent wire damage during attachment . . . won't loosen or vibrate to cause poor ground or rf noise . . . remove danger of sparking . . . offer easy four-step attachment . . . seat precisely into applicable joints.

Bulletin Number 24

TERMINALS AND SPLICES



(A) STRATO-THERM TERMINALS AND SPLICES . . . for high temperature and heat resistant requirements . . . accommodate a wide range of wire sizes either solid or stranded or both . . . with or without fully circumferential wire insulation support as desired.

(B) CERTI-SEAL MOISTURE PROOF WINDOW SPLICES . . . seal out vapors and fluids even at altitude to assure dry splice . . . accommodate over 100 insulation thicknesses . . . resist heavy vibration and shock.

(C) OTHER A-MP TERMINALS AND SPLICES . . . designed for the most diverse circuitry requirements . . . stringently tested for corrosion resistance, vibration resistance, conductivity and long life . . . ideal for all types of electronic equipment.

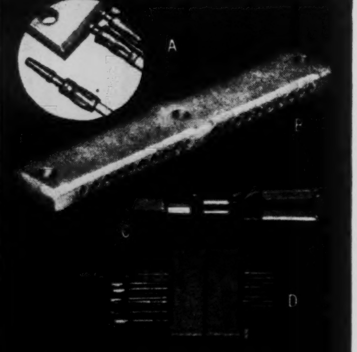
Bulletin Number 37

A-MP products and engineering assistance are available through wholly-owned subsidiaries in: Canada • England • France • Holland • Japan

For more information circle **22** on inquiry card.

FOR BETTER WIRE TERMINATING

AMP TAPER TECHNIQUE



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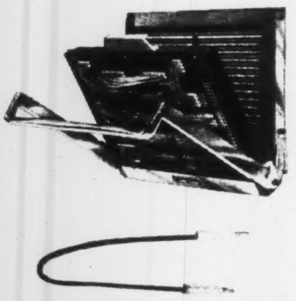
Bulletin Number 77

AMP PATCHBOARD TECHNIQUE



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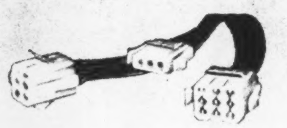
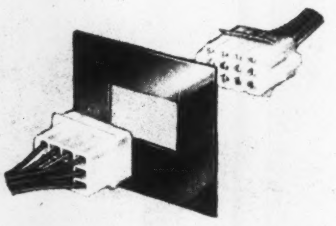
Bulletin Number 58

AMP-Lok MULTIPLE CONNECTORS





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Bulletin Number 45

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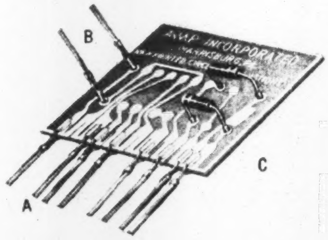
AMP INCORPORATED

GENERAL OFFICES: HARRISBURG, PENNSYLVANIA

For more information circle **22** on inquiry card.

TECHNIQUES . . . SPECIFY A-MP

PRINTED CIRCUIT TECHNIQUE



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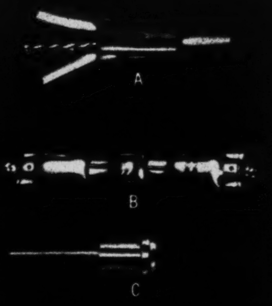
Bulletin Number 81

SHIELDED WIRE PRODUCTS



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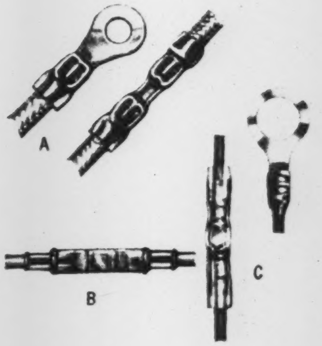
Bulletin Number 24

TERMINALS AND SPLICES



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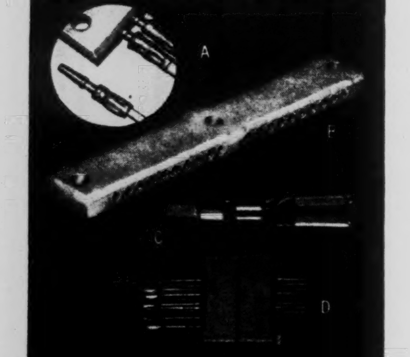
FOR BETTER WIRE TERMINATING

AMP TAPER TECHNIQUE



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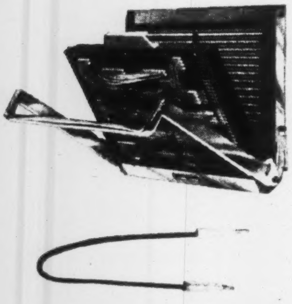
Bulletin Number 77

AMP PATCHBOARD TECHNIQUE



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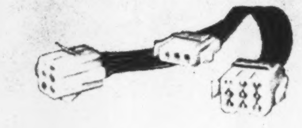
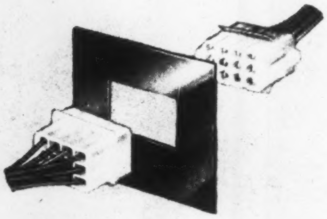
Bulletin Number 58

AMP

AMP-Lok MULTIPLE CONNECTORS





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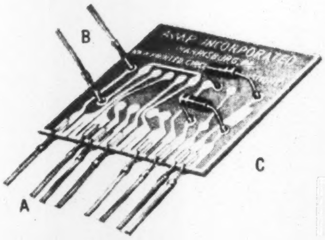
AMP INCORPORATED

GENERAL OFFICES: HARRISBURG, PENNSYLVANIA

TECHNIQUES . . . SPECIFY A-MP

PRINTED CIRCUIT TECHNIQUE



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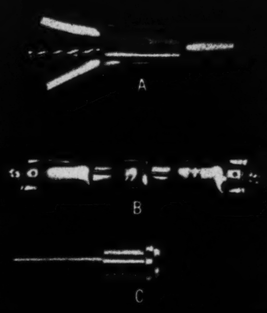
Bulletin Number 81

SHIELDED WIRE PRODUCTS



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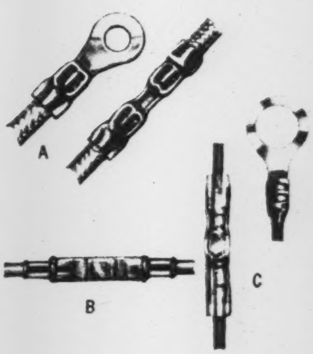
Bulletin Number 24

TERMINALS AND SPLICES



(A) STRATO-THERM TERMINALS AND SPLICES . . . for high temperature and heat resistant requirements . . . accommodate a wide range of wire sizes either solid or stranded or both . . . with or without fully circumferential wire insulation support as desired.

(B) CERTI-SEAL MOISTURE PROOF WINDOW SPLICES . . . seal out vapors and fluids even at altitude to assure dry splice . . . accommodate over 100 insulation thicknesses . . . resist heavy vibration and shock.

(C) OTHER A-MP TERMINALS AND SPLICES . . . designed for the most diverse circuitry requirements . . . stringently tested for corrosion resistance, vibration resistance, conductivity and long life . . . ideal for all types of electronic equipment.

Bulletin Number 37

A-MP products and engineering assistance are available through wholly-owned subsidiaries in: Canada • England • France • Holland • Japan

For more information circle **22** on inquiry card.

International Rectifiers

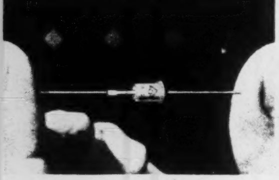
For all DC needs from microwatts to megawatts!

SUB MINIATURE SELENIUM DIODES

Ratings: 20 to 160 volts • 100μa to 11 ma.

Ideal components for bias supplies, sensitive relays, computers etc. High resistance, (10 megohms and higher at −10 volts). Excellent linear forward characteristics. Extremely small, low in cost. Encapsulated to resist adverse environmental extremes. Specify **Bulletin SD-1B.**

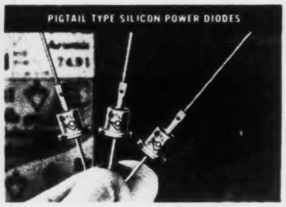
MINIATURE SILICON POWER DIODES



Ratings: 100 to 600 PIV, Up to 500 ma.

Specifically designed for missile and airborne equipment applications where miniaturization and reliability are prime factors. Hermetically sealed, all-welded, pigtail lead construction. Manufactured to meet the most rigid military requirements. Request **Bulletin SR-203**

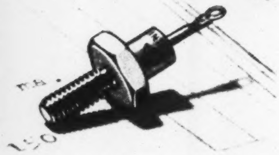
PIGTAIL TYPE SILICON POWER DIODES



Ratings: 50 to 600 volts PIV • 250 to 750 ma.

An extensive line of silicon power diodes for military and industrial applications featuring all-welded, hermetically sealed construction. All designed and manufactured to meet the most rigid military requirements. For information on types for your application **Contact Factory**

STUD MOUNTED SILICON POWER DIODES



Ratings: 50 to 600 volts PIV • 400 ma. to 1 amp.

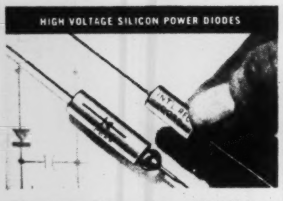
Industrial and military types including the 1N253, 1N254 and 1N255. Stud mounted, hermetically sealed, all-welded construction. Operating temperature range: −55°C to +150°C. Designed and manufactured to meet most rigid military specifications. **Bulletin SR-135C**

SELENIUM TV AND RADIO RECTIFIERS

Ratings: 25 to 156 volts AC, 50 to 1,200 ma. DC

The widest range in the industry! Designed for Radio, Television, TV booster, UHF converter and experimental applications. Input ratings from 25 to 156 volts AC and up. DC output current 50 to 1,200 MA. Write for application information. **Bulletin ER-178-A**

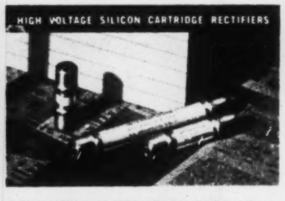
HIGH VOLTAGE SILICON POWER DIODES



Rating: 600 to 2400 volts PIV • 100 to 125 ma.

Three types available. Hermetically sealed, pigtail construction. Style J rated at 600 to 1000 volts PIV at 125 ma. **Bulletin SR-138E** Styles K and L with PIV ratings from 600 to 2400 volts at 100 ma. dc output current are described in technical detail—**Bulletin SR-157.**

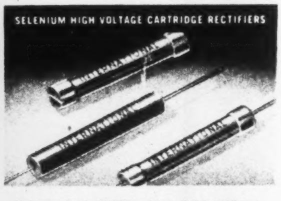
HIGH VOLTAGE SILICON CARTRIDGE RECTIFIERS



Ratings: 1500 to 16,0000 volts PIV @ 45 to 440 ma.

Especially suited for miniaturized military equipment where optimum reliability is a prime factor. Standard types for normal convection cooling and high current types for forced air or oil cooling. Hermetically sealed, metallized ceramic housing. Request **Bulletin SR-225**

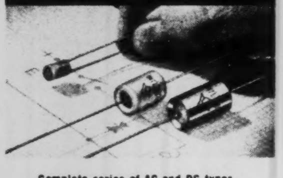
SELENIUM HIGH VOLTAGE CARTRIDGE RECTIFIERS



Ratings: 20 to 20,000 volts • 0.2 to 195 ma.

Designed for long life and reliability in half wave, voltage doubler, bridge, center-tap circuits, and 3-phase circuit types. Phenolic cartridges and hermetically sealed types available. Operating temperature range: −65°C to +100°C. For details specify **Bulletin H-2.**

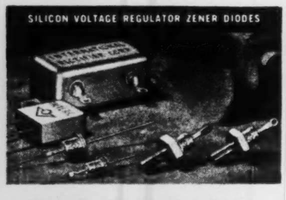
SELENIUM CONTACT PROTECTORS



Complete series of AC and DC types.

Designed to eliminate arcing and erosion across the contacts of relays, switches, etc. A complete series in each of three basic types: diode type, cartridge type and hermetically sealed types for industrial application. For complete data: **Bulletin SR-150-A**

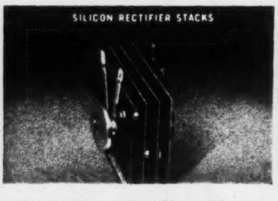
SILICON VOLTAGE REGULATOR ZENER DIODES



Ratings: From 600 milliwatts to 10 watts

A complete series in 6 types. Miniature single junction types, multiple junction types and double anode units. 750 milliwatt and 1 watt types: **Bulletin SR-251,** 3.5 and 10 watt types: **Bulletin SR-252,** Multiple junction 5 watt types: SR-253, Double anode types: SR-254

SILICON RECTIFIER STACKS



Utilizing junctions rated to 1.25 amps DC output

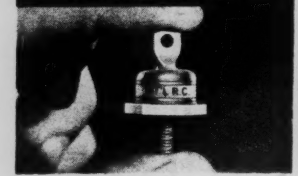
These stacks consist of hermetically sealed junction diodes mounted on copper cooling fins, stacked to include the interconnections required for specific circuits. Junction ratings: 1.25 amps DC output. 70 to 350 AC input volts rms. Request **Bulletin SR-137A**

PHOTOELECTRIC CELLS AND SUN BATTERIES

(Wide range of silicon and selenium types.)

Self-generating cells available in standard and custom sizes, mounted or unmounted. For details on wide selection of selenium types, request **Bulletin PC-649.** Silicon solar cells in mounted and unmounted types are described in technical detail—specify **Bulletin SR-156.**

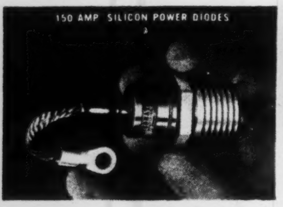
25 AMP SILICON POWER DIODES



Rating: 50 to 500 volts PIV • 25 to 45 Amps.

Advanced ceramic techniques assuring excellent thermal characteristics and mechanical stability are used in the production of these highly reliable, hermetically sealed rectifiers for military or industrial applications. For complete technical data, request **Bulletin SR-304**

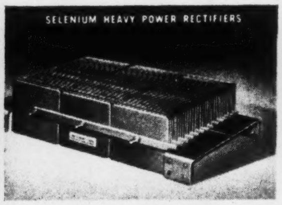
150 AMP SILICON POWER DIODES



Ratings: 50 to 800 volts PIV • 45 to 150 Amps.

An extensive series of standard and reverse polarity types. Optional mounting bases including machine thread and pipe thread types. Machine thread base types: **Bulletin SR-300,** Pipe thread base types. **Bulletin SR-301,** Complete stack assemblies: **Bulletin SR-302**

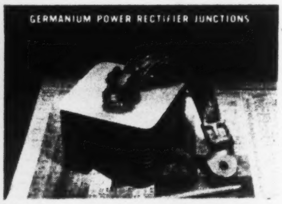
SELENIUM HEAVY POWER RECTIFIERS



Ratings: 6 to 30,000 volts • 50 to 2,300 Amps.

Specifically designed for industrial DC power needs. Patented construction features assure long life. Descriptive bulletins available are: **Bulletin C-349,** (26 volt cells); **Bulletin SR-160,** (45 to 52 volts per cell) and **Bulletin SR-152,** on high current density cells.

GERMANIUM POWER RECTIFIER JUNCTIONS



Ratings: 500 amperes • 26 to 66 volts rms

High capacity junctions especially designed for high-current, low-voltage electrochemical installations. Air cooled, these hermetically sealed junctions provide efficiency to 98.5%. Cast aluminum airfoil housing effects maximum heat transfer. For details **Contact Factory.**

A WORLD OF DIFFERENCE THROUGH RESEARCH

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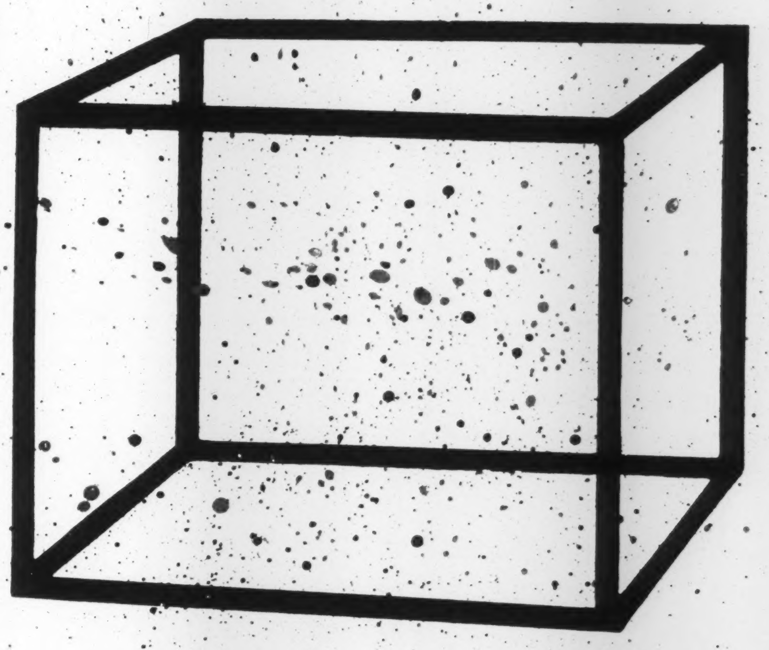
THE WORLD'S LARGEST SUPPLIER OF INDUSTRIAL METALLIC RECTIFIERS

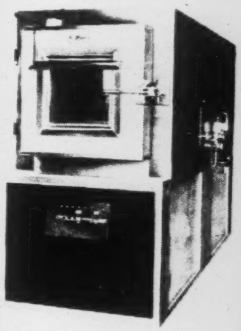
For more information circle **23** on inquiry card.



TENNEY packages any environment

...and delivers on time!

The most extreme field conditions your product will ever meet—duplicated exactly in a compact, precise Tenney environmental testing chamber custom-built for the job! Starting with one of Tenney's extensively-tested chamber prototypes, the right unit can be engineered in a surprisingly short time. In operation, actual environmental conditions are achieved quickly, maintained efficiently throughout the test run, and accurate data is provided for quick, simple evaluation. For literature describing Tenney's prototype chambers, or for recommendations on specific environmental testing problems, write to Tenney Engineering, the world's largest, most experienced creator of environmental testing equipment.



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ENGINEERING, INC.

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PLANTS: UNION, N. J. AND BALTIMORE, MD. • THERE IS A TENNEY CHAMBER TO SIMULATE ALTITUDE, HEAT, COLD, HUMIDITY, VACUUM, EXPLOSION, SAND, DUST, FOG, AND MOST OTHER ENVIRONMENTAL CONDITIONS

For more information circle **24** on inquiry card.

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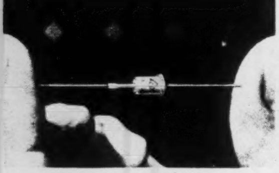
MINIATURE SILICON POWER DIODES



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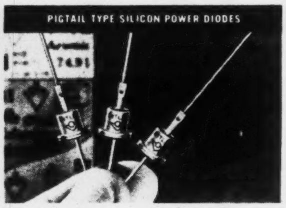

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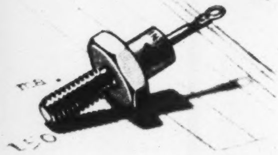

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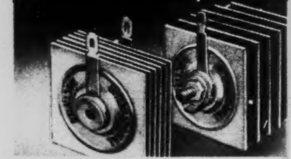
SELENIUM TV AND RADIO RECTIFIERS



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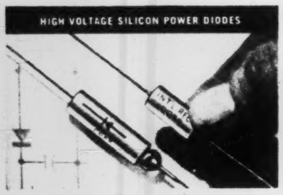

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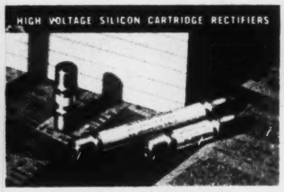

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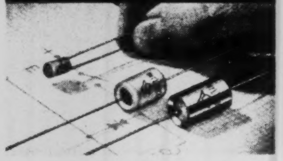

Complete series of AC and DC types.
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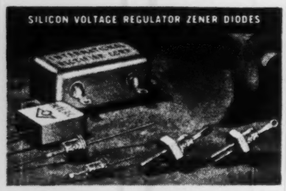

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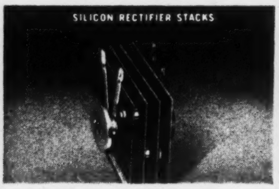
SILICON RECTIFIER STACKS



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Self-generating cells available in standard and custom sizes, mounted or unmounted. For details on wide selection of selenium types, request **Bulletin PC-649.** Silicon solar cells in mounted and unmounted types are described in technical detail—specify **Bulletin SR-156.**

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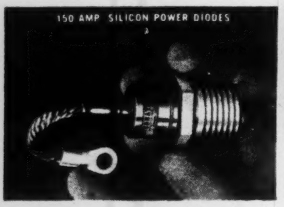

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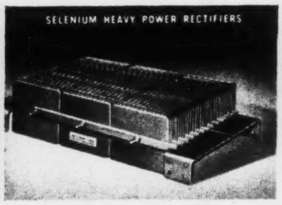

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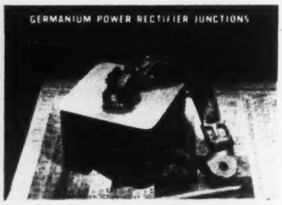

Ratings: 500 amperes • 26 to 68 volts rms
High capacity junctions especially designed for high-current, low-voltage electrochemical installations. Air cooled, these hermetically sealed junctions provide efficiency to 98.5%. Cast aluminum airfoil housing effects maximum heat transfer. For details **Contact Factory.**

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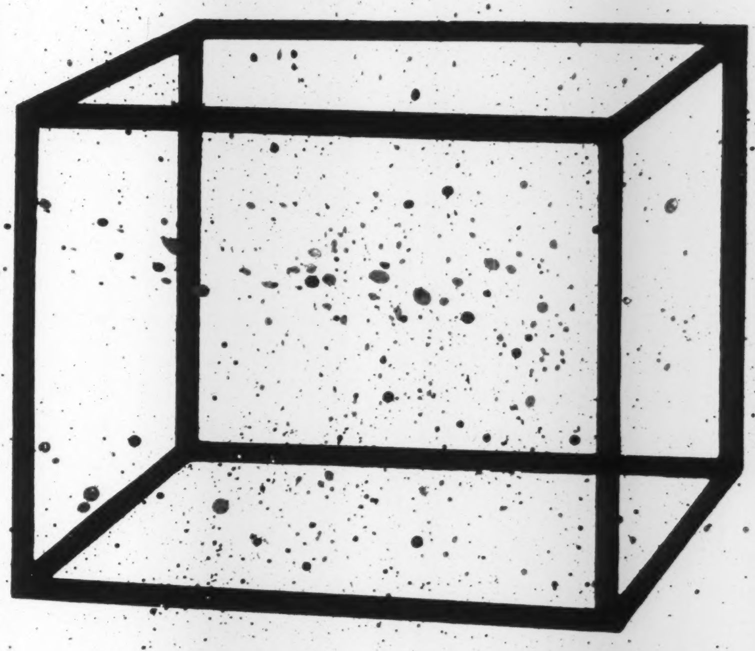

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The most extreme field conditions your product will ever meet — duplicated exactly in a compact, precise Tenney environmental testing chamber custom-built for the job! Starting with one of Tenney's extensively-tested chamber prototypes, the right unit can be engineered in a surprisingly short time. In operation, actual environmental conditions are achieved quickly, maintained efficiently throughout the test run, and accurate data is provided for quick, simple evaluation. For literature describing Tenney's prototype chambers, or for recommendations on specific environmental testing problems, write to Tenney Engineering, the world's largest, most experienced creator of environmental testing equipment.

TENNEY ENGINEERING INC.
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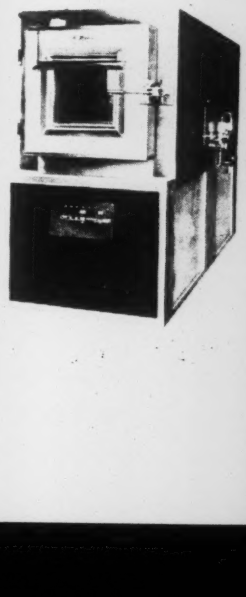
PLANTS: UNION, N. J. AND BALTIMORE, MD. • THERE IS A TENNEY CHAMBER TO SIMULATE ALTITUDE, HEAT, COLD, HUMIDITY, VACUUM, EXPLOSION, SAND, DUST, FOG, AND MOST OTHER ENVIRONMENTAL CONDITIONS



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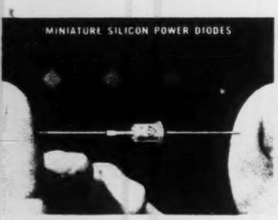

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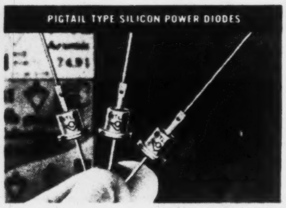

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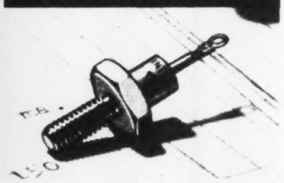

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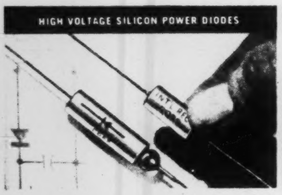
SELENIUM TV AND RADIO RECTIFIERS

Ratings: 25 to 156 volts AC, 50 to 1,200 ma. DC

The widest range in the industry! Designed for Radio, Television, TV booster, UHF converter and experimental applications. Input ratings from 25 to 156 volts AC and up. DC output current 50 to 1,200 MA. Write for application information. **Bulletin ER-178-A**

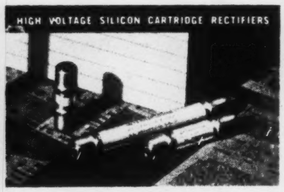
HIGH VOLTAGE SILICON POWER DIODES



Rating: 600 to 2400 volts PIV • 100 to 125 ma.

Three types available. Hermetically sealed, pigtail construction. Style J rated at 600 to 1000 volts PIV at 125 ma. **Bulletin SR-138E** Styles K and L with PIV ratings from 600 to 2400 volts at 100 ma. dc output current are described in technical detail—**Bulletin SR-157.**

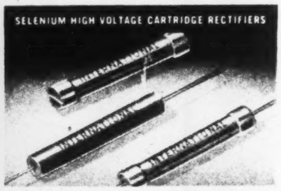
HIGH VOLTAGE SILICON CARTRIDGE RECTIFIERS



Ratings: 1500 to 16,0000 volts PIV @ 45 to 440 ma.

Especially suited for miniaturized military equipment where optimum reliability is a prime factor. Standard types for normal convection cooling and high current types for forced air or oil cooling. Hermetically sealed, metallized ceramic housing. Request **Bulletin SR-225**

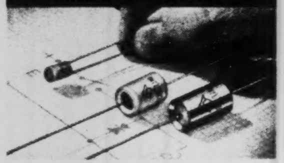
SELENIUM HIGH VOLTAGE CARTRIDGE RECTIFIERS



Ratings: 20 to 20,000 volts • 0.2 to 195 ma.

Designed for long life and reliability in half wave, voltage doubler, bridge, center-tap circuits, and 3-phase circuit types. Phenolic cartridges and hermetically sealed types available. Operating temperature range: -65°C to +100°C. For details specify **Bulletin H-2.**

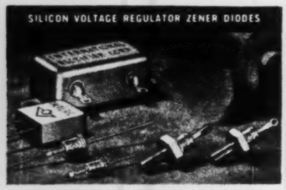
SELENIUM CONTACT PROTECTORS



Complete series of AC and DC types.

Designed to eliminate arcing and erosion across the contacts of relays, switches, etc. A complete series in each of three basic types: diode type, cartridge type and hermetically sealed types for industrial application. For complete data: **Bulletin SR-150-A**

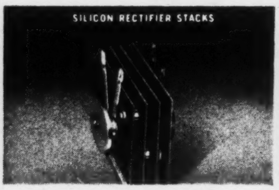
SILICON VOLTAGE REGULATOR ZENER DIODES



Ratings: From 600 milliwatts to 10 watts

A complete series in 6 types. Miniature single junction types, multiple junction types and double anode units. 750 milliwatt and 1 watt types: **Bulletin SR-251,** 3.5 and 10 watt types: **Bulletin SR-252,** Multiple junction 5 watt types: SR-253, Double anode types: SR-254

SILICON RECTIFIER STACKS



Utilizing junctions rated to 1.25 amps DC output

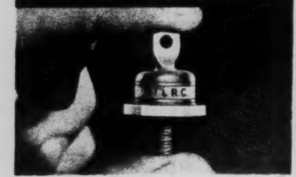
These stacks consist of hermetically sealed junction diodes mounted on copper cooling fins, stacked to include the interconnections required for specific circuits. Junction ratings: 1.25 amps. DC output: 70 to 350 AC input volts rms. Request **Bulletin SR-137A**

PHOTOELECTRIC CELLS AND SUN BATTERIES

(Wide range of silicon and selenium types.)

Self-generating cells available in standard and custom sizes, mounted or unmounted. For details on wide selection of selenium types, request **Bulletin PC-649.** Silicon solar cells in mounted and unmounted types are described in technical detail—specify **Bulletin SR-156.**

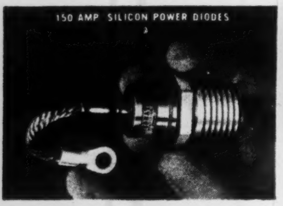
25 AMP SILICON POWER DIODES



Rating: 50 to 500 volts PIV • 25 to 45 Amps.

Advanced ceramic techniques assuring excellent thermal characteristics and mechanical stability are used in the production of these highly reliable, hermetically sealed rectifiers for military or industrial applications. For complete technical data, request **Bulletin SR-304**

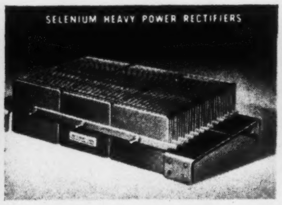
150 AMP SILICON POWER DIODES



Ratings: 50 to 800 volts PIV • 45 to 150 Amps.

An extensive series of standard and reverse polarity types. Optional mounting bases including machine thread and pipe thread types. Machine thread base types: **Bulletin SR-300,** Pipe thread base types. **Bulletin SR-301,** Complete stack assemblies: **Bulletin SR-302**

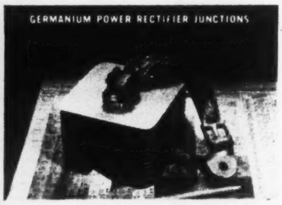
SELENIUM HEAVY POWER RECTIFIERS



Ratings: 6 to 30,000 volts • 50 to 2,300 Amps.

Specifically designed for industrial DC power needs. Patented construction features assure long life. Descriptive bulletins available are: **Bulletin C-349,** (26 volt cells); **Bulletin SR-160,** (45 to 52 volts per cell) and **Bulletin SR-152,** on high current density cells.

GERMANIUM POWER RECTIFIER JUNCTIONS



Ratings: 500 amperes • 26 to 66 volts rms

High capacity junctions especially designed for high-current, low-voltage electrochemical installations. Air cooled, these hermetically sealed junctions provide efficiency to 98.5%. Cast aluminum airfoil housing effects maximum heat transfer. For details **Contact Factory.**

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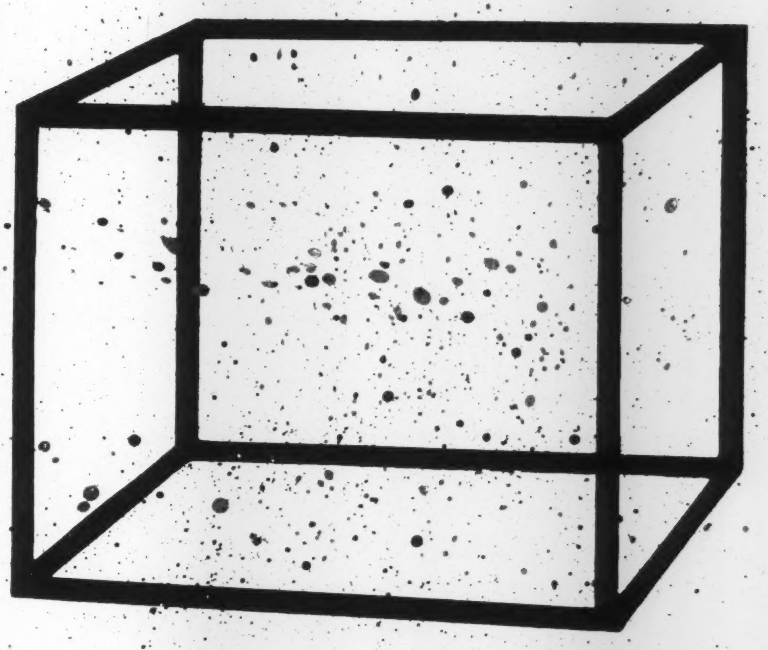
NEW YORK AREA OFFICE: 132 E. 70th Street, TRafalgar 9-3330 • **CHICAGO AREA OFFICE:** 205 W. Wacker Drive., FRanklin 2-3888 • **NEW ENGLAND AREA OFFICE:** 17 Dunster Street, Cambridge, Mass., UNiversity 4-6520 • **PENNSYLVANIA AREA OFFICE:** Suburban Square Building, Ardmore, Penn., MIdway 9-1428

THE WORLD'S LARGEST SUPPLIER OF INDUSTRIAL METALLIC RECTIFIERS

For more information circle **23** on inquiry card.



TENNEY packages any environment

...and delivers on time!

The most extreme field conditions your product will ever meet — duplicated exactly in a compact, precise Tenney environmental testing chamber custom-built for the job! Starting with one of Tenney's extensively-tested chamber prototypes, the right unit can be engineered in a surprisingly short time. In operation, actual environmental conditions are achieved quickly, maintained efficiently throughout the test run, and accurate data is provided for quick, simple evaluation. For literature describing Tenney's prototype chambers, or for recommendations on specific environmental testing problems, write to Tenney Engineering, the world's largest, most experienced creator of environmental testing equipment.

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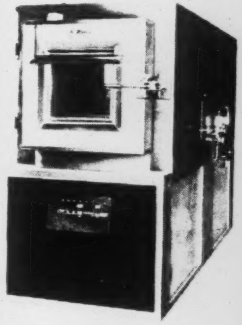
ENGINEERING, INC.

1090 SPRINGFIELD ROAD, UNION, N. J.

PLANTS: UNION, N. J. AND BALTIMORE, MD. • THERE IS A TENNEY CHAMBER TO SIMULATE ALTITUDE, HEAT, COLD, HUMIDITY, VACUUM, EXPLOSION, SAND, DUST, FOG, AND MOST OTHER ENVIRONMENTAL CONDITIONS



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International Rectifiers

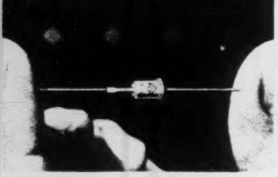
For all DC needs from microwatts to megawatts!

SUB MINIATURE SELENIUM DIODES

Ratings: 20 to 160 volts • 100µa to 11 ma.

Ideal components for bias supplies, sensitive relays, computers etc. High resistance, (10 megohms and higher at –10 volts). Excellent linear forward characteristics. Extremely small, low in cost. Encapsulated to resist adverse environmental extremes. Specify **Bulletin SD-1B.**

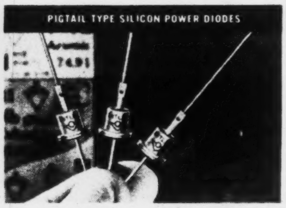
MINIATURE SILICON POWER DIODES



Ratings: 100 to 600 PIV, Up to 500 ma.

Specifically designed for missile and airborne equipment applications where miniaturization and reliability are prime factors. Hermetically sealed, all-welded, pigtail lead construction. Manufactured to meet the most rigid military requirements. Request **Bulletin SR-203**

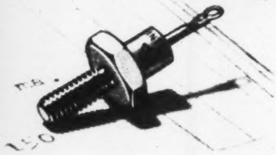
PIGTAIL TYPE SILICON POWER DIODES



Ratings: 50 to 600 volts PIV • 250 to 750 ma.

An extensive line of silicon power diodes for military and industrial applications featuring all-welded, hermetically sealed construction. All designed and manufactured to meet the most rigid military requirements. For information on types for your application **Contact Factory**

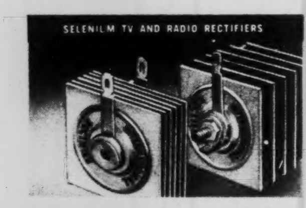
STUD MOUNTED SILICON POWER DIODES



Ratings: 50 to 600 volts PIV • 400 ma. to 1 amp.

Industrial and military types including the 1N253, 1N254 and 1N255. Stud mounted, hermetically sealed, all-welded construction. Operating temperature range: –55°C to +150°C. Designed and manufactured to meet most rigid military specifications. **Bulletin SR-135C**

SELENIUM TV AND RADIO RECTIFIERS



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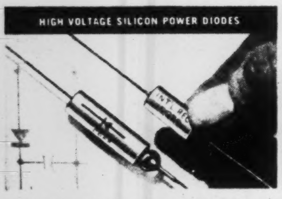

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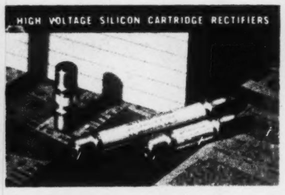

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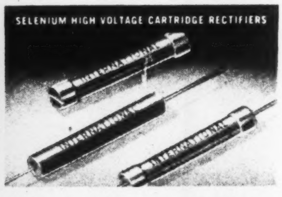

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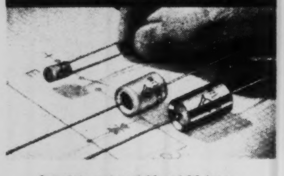

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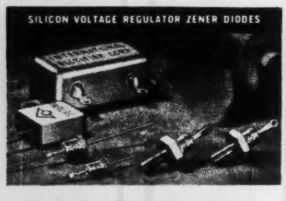

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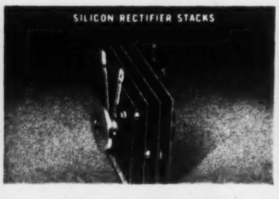

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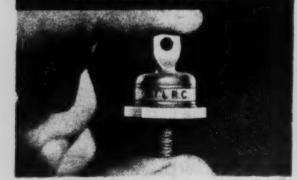

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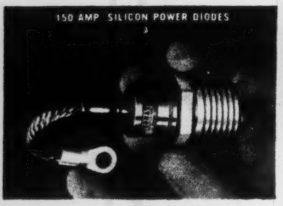

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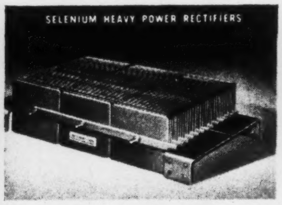

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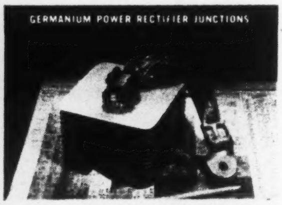

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High capacity junctions especially designed for high-current, low-voltage electrochemical installations. Air cooled, these hermetically sealed junctions provide efficiency to 98.5%. Cast aluminum airfoil housing effects maximum heat transfer. For details **Contact Factory.**

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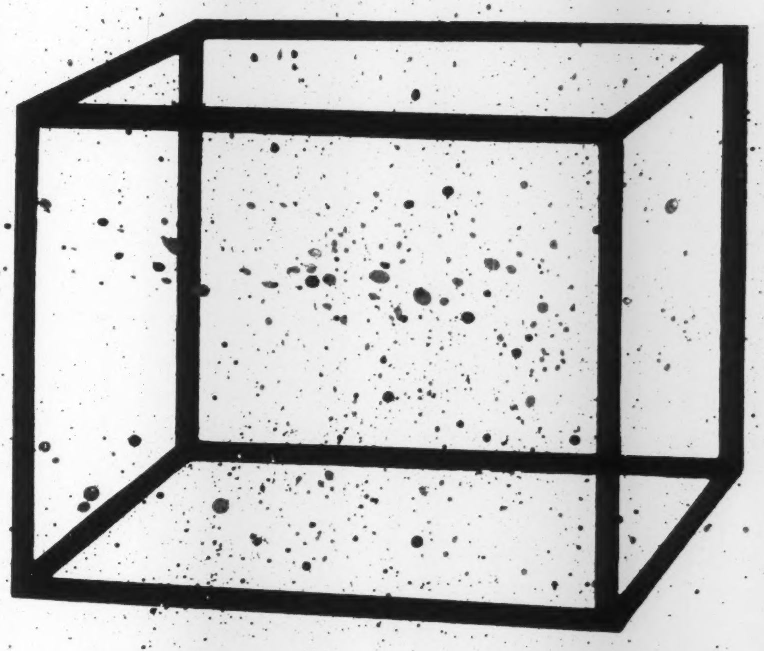

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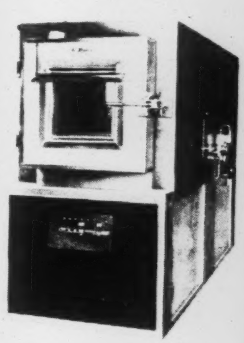

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For more information circle **24** on inquiry card.

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AIR VELOCITY...
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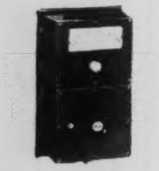
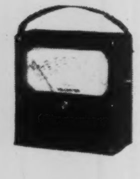


PYROMETERS

A complete line of single or multiple-point pyrometers—portable or mounted—for temperature measurement in all types of service. Particularly adapted to exhaust, cooling water and lubricating oil temperature measurements on diesel and gas engines. For furnaces, kilns, ovens, vats, pots, heat exchangers, kettles, reactors, autoclaves, pipe lines and any similar equipment where accurate temperatures are desired.

PYROCON

A self-contained, hand-held portable contact pyrometer. Takes any surface temperature. Widely used in plastic molding, chemical processing, electrical, rubber and paper manufacturing industries. Available with fixed or flexible arm.

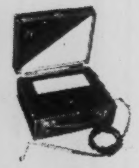


VELOMETERS

An instantaneous air velocity meter giving direct readings in feet per minute without necessity of timing, calculation, or reference to tables or charts. A compact, self-contained, portable unit. For low range readings, Velometer is held in air stream. For high range readings, tube-connected special jets provide convenient use in any location. Standard ranges from 20 f.p.m. to 24,000 f.p.m.

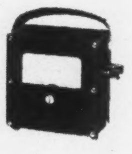
DEWPOINTERS

An improved instrument for simple, rapid dew point reading of any gas. Indication takes place in an enclosed observation chamber under accurately controlled conditions. Dew or fog suspended in air—not on mirrored surface—makes it easy for two or more observers to get the same accurate results. The Alnor Dewpointer is a complete, self-contained unit—no external coolants or other apparatus are required.



SURFACE PYROMETER

The Alnor type 2300 Pyrometer sets a new high in precision measurement of low surface temperatures. Special design, from Alnico magnet to the finest, quick reacting thermocouple, assures unfailing accuracy ...speed and dependability. This is a self-contained, sturdy unit—easily carried and used anywhere on a wide variety of applications. Direct reading, six-inch mirrored scale is easily read...quickly understood. The instrument is available in five Fahrenheit scale ranges with a span as small as 150°.



PORTABLE PYROMETER

The Alnor type 1500 is designed for work with electrically heated mantles. This lightweight, magnetically shielded pyrometer gives fast, precise temperature reading to production men in all industries. Choice of ten scale ranges, 0-400° to 0-3000°F. Automatic cold end compensator is standard equipment.

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ILLINOIS TESTING LABORATORIES, INC.
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PRECISION INSTRUMENTS FOR EVERY INDUSTRY

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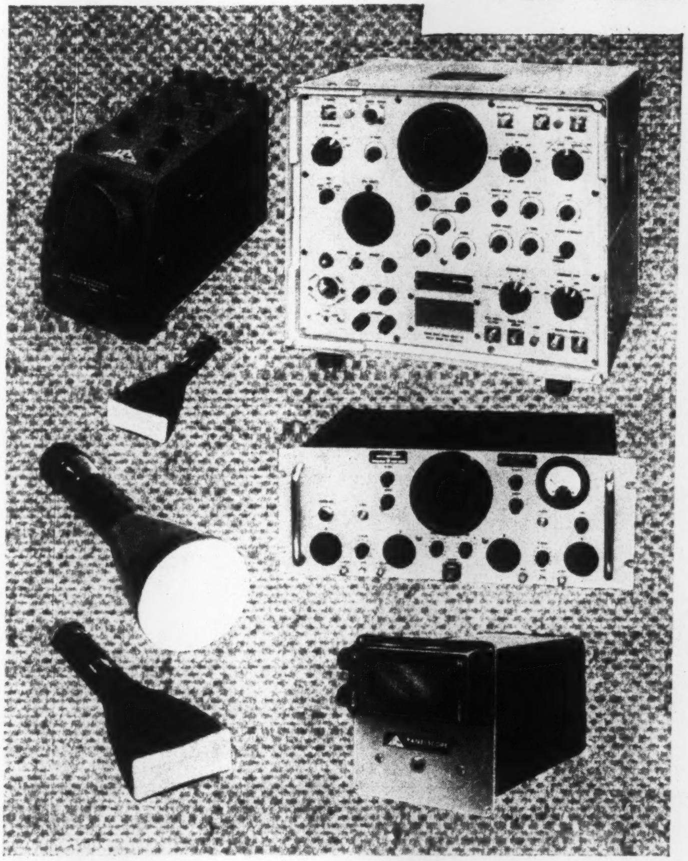
FOR YOUR OSCILLOSCOPE NEEDS



OSCILLOSCOPES

AMPLIFIERS: *From 2.5 millivolts/inch. From DC to milli-microseconds.*

SWEEPS: *Trigger or repetitive. From μs to seconds.*

WEIGHTS: *From 5 pounds up.*

SIZE: *From 1/5 cubic foot.*

CONSTRUCTION: *Rugged through MIL itary.*

PRICE: *From $80.*

CATHODE RAY TUBES

SCREENS: *Rectangular from 3 x 1 1/2 inches. Round from 3 inches.*

LENGTH: *From 7 inches short.*

PHOSPHORS: *P1, P2, P7, P11.*

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PANELSCOPE* PANELPACK* POCKETSCOPE*
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WATERMAN PRODUCTS

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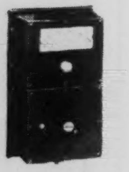
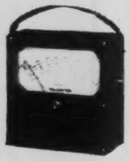
Alnor® FOR PRECISE MEASUREMENT OF

TEMPERATURE...
AIR VELOCITY...
DEW POINT...



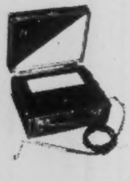
PYROMETERS

A complete line of single or multiple-point pyrometers—portable or mounted—for temperature measurement in all types of service. Particularly adapted to exhaust, cooling water and lubricating oil temperature measurements on diesel and gas engines. For furnaces, kilns, ovens, vats, pots, heat exchangers, kettles, reactors, autoclaves, pipe lines and any similar equipment where accurate temperatures are desired.



VELOMETERS

An instantaneous air velocity meter giving direct readings in feet per minute without necessity of timing, calculation, or reference to tables or charts. A compact, self-contained, portable unit. For low range readings, Velometer is held in air stream. For high range readings, tube-connected special jets provide convenient use in any location. Standard ranges from 20 f.p.m. to 24,000 f.p.m.



SURFACE PYROMETER

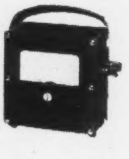
The Alnor type 2300 Pyrometer sets a new high in precision measurement of low surface temperatures. Special design, from Alnico magnet to the finest, quick reacting thermocouple, assures unfailing accuracy ...speed and dependability. This is a self-contained, sturdy unit—easily carried and used anywhere on a wide variety of applications. Direct reading, six-inch mirrored scale is easily read...quickly understood. The instrument is available in five Fahrenheit scale ranges with a span as small as 150°.

PYROCON

A self-contained, hand-held portable contact pyrometer. Takes any surface temperature. Widely used in plastic molding, chemical processing, electrical, rubber and paper manufacturing industries. Available with fixed or flexible arm.

DEWPOINTERS

An improved instrument for simple, rapid dew point reading of any gas. Indication takes place in an enclosed observation chamber under accurately controlled conditions. Dew or fog suspended in air—not on mirrored surface—makes it easy for two or more observers to get the same accurate results. The Alnor Dewpointer is a complete, self-contained unit—no external coolants or other apparatus are required.



PORTABLE PYROMETER

The Alnor type 1500 is designed for work with electrically heated mantles. This lightweight, magnetically shielded pyrometer gives fast, precise temperature reading to production men in all industries. Choice of ten scale ranges, 0-400° to 0-3000°F. Automatic cold end compensator is standard equipment.

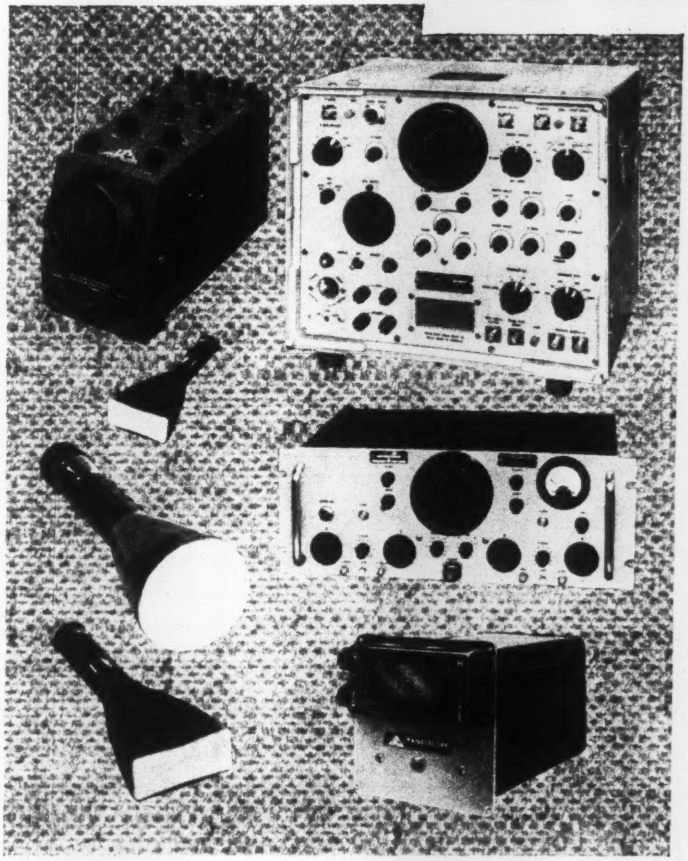
Alnor®
ILLINOIS TESTING LABORATORIES, INC.
Room 537, 420 N. LaSalle St. • Chicago 10, Illinois

PRECISION INSTRUMENTS FOR EVERY INDUSTRY

For more information circle **25** on inquiry card.

SEE WATERMAN FIRST

FOR YOUR OSCILLOSCOPE NEEDS



OSCILLOSCOPES

AMPLIFIERS: *From 2.5 millivolts/inch. From DC to milli-microseconds.*

SWEEPS: *Trigger or repetitive. From μs to seconds.*

WEIGHTS: *From 5 pounds up.*

SIZE: *From 1/5 cubic foot.*

CONSTRUCTION: *Rugged through MIL itary.*

PRICE: *From $80.*

CATHODE RAY TUBES

SCREENS: *Rectangular from 3 x 1 1/2 inches. Round from 3 inches.*

LENGTH: *From 7 inches short.*

PHOSPHORS: *P1, P2, P7, P11.*

MANUFACTURERS OF
PANELSCOPE* PANELPACK* POCKETSCOPE*
PULSESCOPE* RAKSCOPE* SYSTEMAT*;
. . . And Other Associated Equipment
**Registered Trademarks*

write for Engineering Data

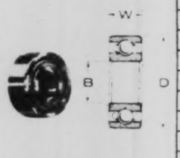
WATERMAN PRODUCTS CO., INC.
2445 Emerald Street CABLE ADDRESS—Poketscope
PHILADELPHIA 25, PA. GArfield 6-8600

WATERMAN PRODUCTS

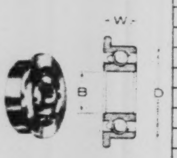
For more information circle **26** on inquiry card.

There's an MPB Bearing
to help you perform
Miracles in Miniaturization

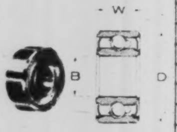
RADIAL RETAINER SERIES

	BEARING NO.	BORE	O.D.	WIDTH
	552C	.0400"	.1250"	.0469"
	2½C	.0469"	.1562"	.0625"
	▼3C	.0550"	.1875"	.0781"
	§▼4C	.0781"	.2500"	.0937"
	§▼5C	.0937"	.3125"	.1094"
	3332C	.0937"	.1875"	.0625"
	§418C	.1250"	.2500"	.0937"
	§▼518C	.1250"	.3125"	.1094"
	§▼5532C	.1562"	.3125"	.1094"
	§▼5632C	.1875"	.3125"	.1094"
	§▼618C	.1250"	.3750"	.1094"
	§▼6632C	.1875"	.3750"	.1250"
	§614C	.2500"	.3750"	.1250"
	814C	.2500"	.5000"	.1250"

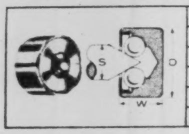
FLANGED RADIAL SERIES *(Full Race or Retainer Type)*

	2½F	2½FC	.0469"	.1562"	.0625"
	3F	▼3FC	.0550"	.1875"	.0781"
	4F	▼4FC	.0781"	.2500"	.0937"
	5F	▼5FC	.0937"	.3125"	.1094"
	3332F	3332FC	.0937"	.1875"	.0625"
	418F	418FC	.1250"	.2500"	.0937"
	518F	▼518FC	.1250"	.3125"	.1094"
	5532F	▼5532FC	.1562"	.3125"	.1094"
	5632F	▼5632FC	.1875"	.3125"	.1094"
	618F	▼618FC	.1250"	.3750"	.1094"
	6632F	▼6632FC	.1875"	.3750"	.1250"
	614F	614FC	.2500"	.3750"	.1250"
	814F	814FC	.2500"	.5000"	.1250"

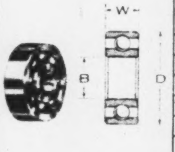
DOUBLE SHIELDED RADIAL RETAINER SERIES

	2½CHH	.0469"	.1562"	.0937"
	3CHH	.0550"	.1875"	.1094"
	4CHH	.0781"	.2500"	.1406"
	5CHH	.0937"	.3125"	.1406"
	418CHH	.1250"	.2500"	.1094"
	518CHH	.1250"	.3125"	.1406"
	5532CHH	.1562"	.3125"	.1250"
	5632CHH	.1875"	.3125"	.1250"
	618CHH	.1250"	.3750"	.1406"
	6632CHH	.1875"	.3750"	.1250"
	614CHH	.2500"	.3750"	.1250"
	814CHH	.2500"	.5000"	.1875"

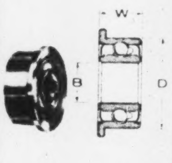
PIVOT SERIES

	1½PR	.020"†	.0590"	.0472"
	3PR	.030"†	.1181"	.0709"
	▼4PR	.040"†	.1575"	.0945"
	▼5PR	.050"†	.1968"	.1161"
	▼7½PR	.075"†	.2953"	.1772"
	▼10PR	.100"†	.3937"	.2362"

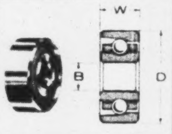
RADIAL AND SUPER-LIGHT RADIAL SERIES

	BEARING NO.	BORE	O.D.	WIDTH
	100	.0250"	.1000"	.0312"
	2	.0400"	.1250"	.0469"
	2½	.0469"	.1562"	.0625"
	▼3	.0550"	.1875"	.0781"
	▼4	.0781"	.2500"	.0937"
	▼5	.0937"	.3125"	.1094"
	3332	.0937"	.1875"	.0625"
	418	.1250"	.2500"	.0937"
	▼518	.1250"	.3125"	.1094"
	▼5532	.1562"	.3125"	.1094"
	▼5632	.1875"	.3125"	.1094"
	5732	.2187"	.3125"	.1094"
	▼618	.1250"	.3750"	.1094"
	▼6632	.1875"	.3750"	.1250"
	614	.2500"	.3750"	.1250"

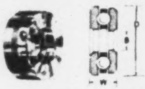
DOUBLE SHIELDED FLANGED RADIAL RETAINER SERIES

	2½FCHH	.0469"	.1562"	.0937"
	3FCHH	.0550"	.1875"	.1094"
	4FCHH	.0781"	.2500"	.1406"
	5FCHH	.0937"	.3125"	.1406"
	418FCHH	.1250"	.2500"	.1094"
	518FCHH	.1250"	.3125"	.1406"
	5532FCHH	.1562"	.3125"	.1250"
	5632FCHH	.1875"	.3125"	.1250"
	618FCHH	.1250"	.3750"	.1406"
	6632FCHH	.1875"	.3750"	.1250"
	614FCHH	.2500"	.3750"	.1250"
	814FCHH	.2500"	.5000"	.1875"

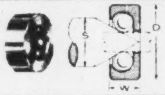
HIGH SPEED SERIES *(Including Flanged Type)*

	3M	3FM	.0550"	.1875"	.0781"
	4M	4FM	.0781"	.2500"	.0937"
		4564FM	.0781"	.2500"	.0937"
	5M	5FM	.0937"	.3125"	.1094"
	518M	518FM	.1250"	.3125"	.1094"
	618M	618FM	.1250"	.3750"	.1094"
		R2FM	.1250"	.3750"	.1562"

THRUST SERIES

	2T	.0400"	.1250"	.0625"
	4T	.0937"	.2500"	.0937"
	5T	.1250"	.3125"	.1250"
	6T	.1875"	.3750"	.1500"
	7T	.1250"	.4375"	.1875"

ANGULAR CONTACT SERIES

	2A	.042"†	.1250"	.0469"
	▼3A	.062"†	.1875"	.0700"
	▼4A	.085"†	.2500"	.0937"
	▼6A	.124"†	.3750"	.1406"
	▼6A7B	.150"†	.3750"	.1406"

Prefixes indicate material: Standard is chrome bearing steel (SAE 52100): use no prefix. All bearings, except No. 1½PR, also available in 440 stainless: use prefix SS in ordering. ▼Indicates also available in 25 beryllium: use prefix NM in ordering. §Indicates sizes available with spring separator, specify suffix S in place of C as shown. †Indicates minimum shaft (S) dimension, (SE) dimension on request. Single Shielded Radial Retainer Series also available, specify CH, dimensions identical to Radial Retainer Series with exception of following which are wider: 2½ CH (.0937), 3CH (.0937), and 4CH (.1094). Single Shielded Flanged Radial Retainer Series also available, all dimensions identical to Double Shielded Flanged Radial Retainer Series. Specify FCH and side to be shielded. Grooved Radial Retainer bearings are also available in 9 sizes. Root diameter of groove is the same as O.D. of equivalent Radial bearing. Self-Aligning Series and extended inner bearings available. Details on request.

MPB ball bearings

are available in ten design series and in more than 500 different types and sizes which normally can be supplied from stock for prompt installation.

Instrument manufacturers and users of small precision mechanisms can now utilize all the well-known extra advantages of anti-friction bearings (accurate alignment, long wear, freedom from attention) universally accepted in larger quality equipment.

For more than 20 years **MPB** ball bearings have contributed to the successful operation of precision mechanisms. A pioneer in designs and dimensions now being internationally standardized, **MPB** has also originated many precision manufacturing techniques. All **MPB** ball bearings are ground, lapped, honed and or burnished in accordance with highest quality practice for optimum operating characteristics. Inspection limit tolerances are equal to ABEC 5 or better.

The most extensive engineering knowledge in miniature bearing applications is available to you. More than 9 million **MPB** ball bearings have been installed in precision mechanisms. For our new 1958 Catalog giving complete specifications and additional data, write Miniature Precision Bearings, Inc., 70 Precision Park, Keene, N. H.

MPB

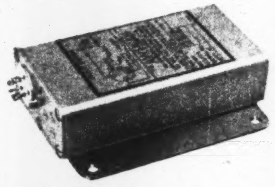
Helps you perform miracles in miniaturization

For more information circle **27** on inquiry card.

CUSTOM DESIGNED TO SAVE SPACE AND WEIGHT

TOUGH and TINY... the A. W. HAYDON CO.'S unique line of SUB-MINIATURE TIMING DEVICES

CUSTOM DESIGNED TO MEET MILITARY REQUIREMENTS



REPEAT CYCLE TIMERS
Write for Bulletin AWH-RC-301

TIME DELAY RELAYS
Write for Bulletin AWH-TD-502

features

Hermetically Sealed Housings
1/4 the size of standard designs
1/2 the weight of standard designs
Direct Current or 400 Cycle
Aircraft & Missile Applications
Wide range of timing programs
Timers have 1 x 2 inch cross section.
Indicators only 1 1/4 inch diameter.

Miniature Motors and
Custom Devices
also available.

HOURS
AND TENTHS
AWH HAYDON
COMPANY
WATERBURY, CONN.
ELAPSED TIME INDICATOR

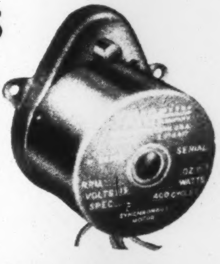
ELAPSED TIME INDICATORS
Dial face or Digital (as shown)
Square or Compact Flange Mounting (as shown)
Write for Bulletin AWH-ET-602

TIME-PROVEN STANDARDS OR TEST-PROVEN SUB-MINIATURES . . . ALL DESIGNED FOR RELIABLE OPERATION IN YOUR APPLICATION

TIMING AND CONTROL DEVICES BY THE A. W. HAYDON COMPANY ARE RECOGNIZED AS THE MOST DEPENDABLE PERFORMERS IN THE FIELD.

400 CYCLE MOTORS

Reversible — Light weight (8 ounces). 115 volts ± 10%; 55 milliamps. Torque: 0.025 oz-in at 3000 rpm. Meet Military Requirements. Write for Bulletin AWH MO 803.

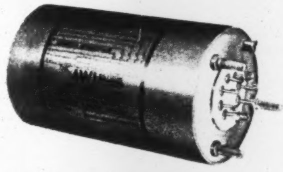


MINIATURE HERMETICALLY SEALED TIMERS

Supplied in 2½" diameter housing. Optional mounting and electrical termination.

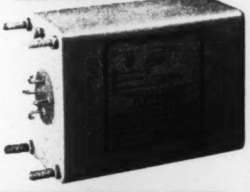
TIME DELAY RELAYS
Single or multiple switching. Delay periods from 2 seconds to 3 hours. Write for Bulletin AWH TD 400.

REPEAT CYCLE TIMERS
Single or multiple switching. Wide Range of Time Cycles. Write for Bulletin AWH RC 200.

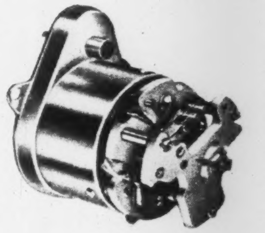


PROPORTIONAL DELAYED RESET TIME DELAY RELAY

Provides a controlled reset rate. Designed to meet special applications. Hermetically sealed or enclosed in dust cover. Meets military requirements. Write for Bulletin AWH TD 402.



GOVERNED DC MOTORS

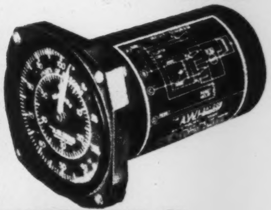


The A. W. Haydon Company now offers 3 series of Chronometrically Governed DC Motors. Each designed to do the same job in a different application.
5700 Series — non-military applications where extreme temperature, vibration and shock are not experienced.
5600 Series — Aircraft and military applications where extreme temperature and moderate vibration and shock are encountered.
5800 Series — Aircraft and missile applications where extreme temperature, vibration, and shock are encountered. Write for Bulletin AWH MO 800, -801, -802, -804.

SPECIAL TIME DELAY RELAY

Supplied in 2.2" diameter housing. Precision unit: ± 1% accuracy. Meets military requirements. Adjustable over wide range. Write for Bulletin AWH TD 500.

STOP CLOCKS



Precision Movement — Electrical Reset. Temperature Range −55° C. to 85°C. Option on Mounting, Electrical Termination, Calibration Range. 20-30 Volt D.C. Write for Bulletin AWH-ET-700. 115 Volt, 400 CPS. Write for Bulletin AWH-ET-701.

OTHER BULLETINS AVAILABLE ON REQUEST

(or write for complete catalog).

AWH-MS-101-102	Application Data Sheets
AWH-RC-201	Basic Repeat Cycle Timers
AWH-RC-300	Precision Interval Timers
AWH-TD-401	Hermetic Adjustable Time Delay Relays
AWH-TD-403	Basic Time Delay Relays
AWH-TD-404-405	Dial Adjustable Time Delay Relays
AWH-TD-406	Basic Hermetic Time Delay Relays
AWH-ET-600-601	Elapsed Time Indicators
AWH-MO-805	Basic Direct Current Timing Motors

Many other specials also available, such as Electronic Time Delay Relays, Intervalometers, Reversible 60 CPS Motors.

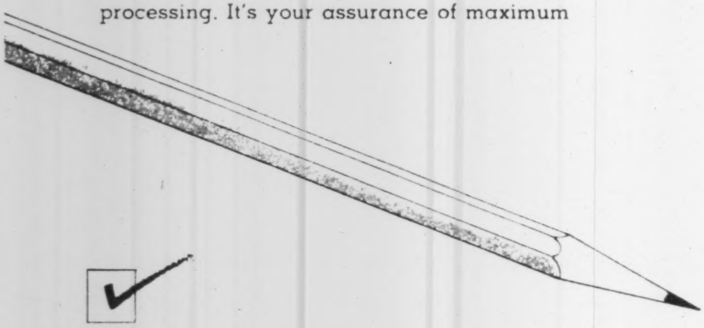
The
A. W. HAYDON
COMPANY
224 NORTH ELM STREET
WATERBURY 20, CONNECTICUT

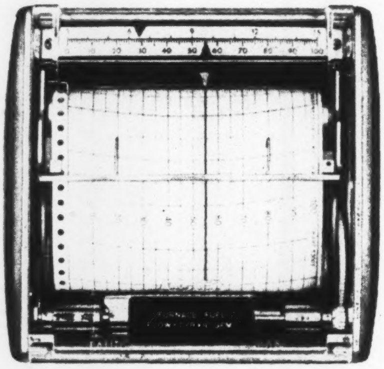
Custom Design and Manufacture of Electro-Mechanical Timing Devices

For more information circle **28** on inquiry card.

QUICK CHECK LIST of

If your operation can benefit from more accurate measurement or control of any of the process variables listed below, Foxboro Instrumentation offers the most advanced equipment to supply it. This complete line of individual instruments and fully integrated systems is the product of years of engineering experience in every phase of industrial processing. It's your assurance of maximum performance and freedom from maintenance. Complete details on any instrument or system shown here will be sent promptly on request. In addition, Foxboro Field Engineers will gladly assist you in solving individual control problems. For complete details, write **The Foxboro Company, 4613 Neponset Ave., Foxboro, Mass.**





☑

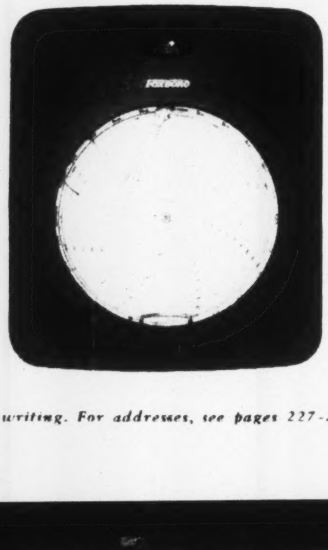
Indicators · Recorders · Controllers

air weight
btu
capacitance
compression
concentration, solution
conductivity, solution
consistency
current — a-c, d-c
density
dew point
displacement
drag
flow
force
gas analysis
humidity
liquid analysis
liquid level
load
moisture content
motion
motor load
operation, schedule
operation, time
oxidation-reduction potential
pH
position
power, electric
pressure
resistance, electric
sheet moisture
sheet weight
specific gravity
speed
strain
stress
temperature
tension
thrust
torque
vacuum
viscosity
voltage
weight

☑

Controller Actions (Pneumatic or Electric)

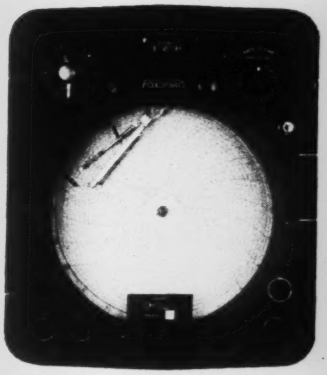
On-Off
Proportional
Proportional with Derivative
Proportional with Reset ("Stabilog")
Proportional with Reset and Derivative ("Hyper-Reset")
2- and 3-position
Multi-Position



FOXBORO
REG. U.S. PAT. OFF.

For more information circle **29** on inquiry card.

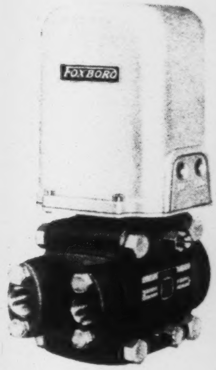
FOXBORO Instruments



☑

Special-Purpose Controller Types

Auto-selector
Averaging
Dual
Duplex
Limit
Multi-Zone
Ratio
Relation
Sequence
Time Schedule
(cam and camless types)
Triple



☑

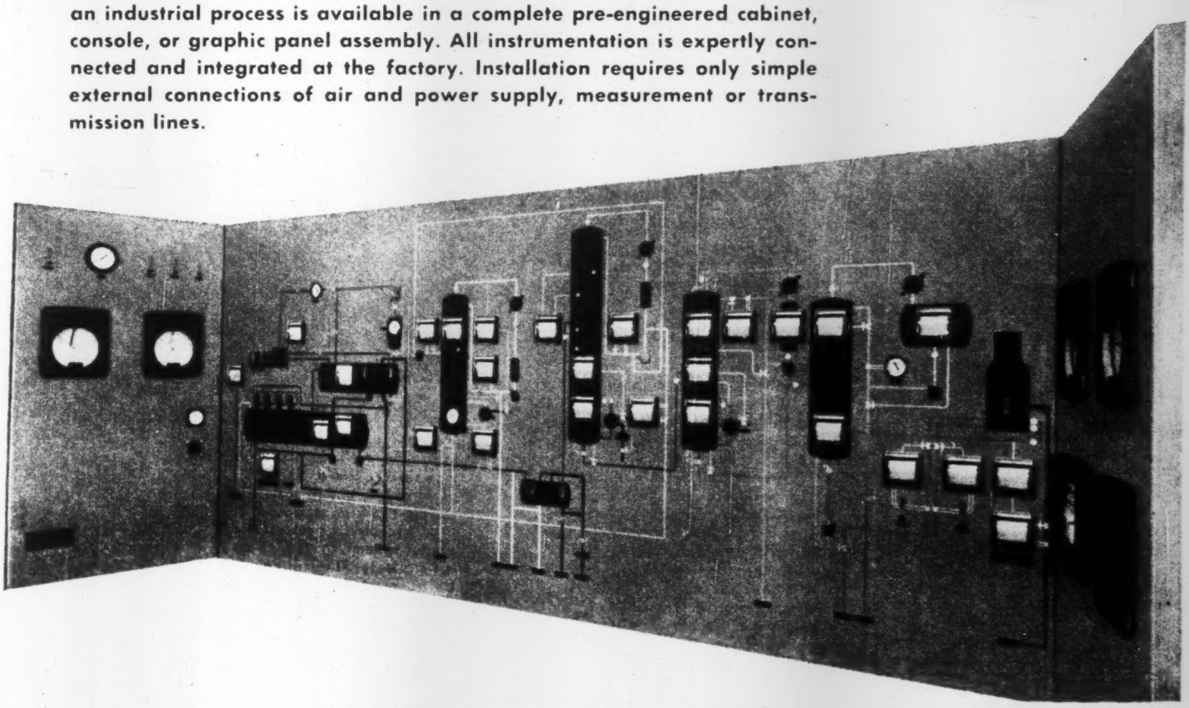
Transmission Systems

Pneumatic
Electric
Telemetering

☑

Cabinet and Panel Assemblies

Any combination of Foxboro Instruments required for precise control of an industrial process is available in a complete pre-engineered cabinet, console, or graphic panel assembly. All instrumentation is expertly connected and integrated at the factory. Installation requires only simple external connections of air and power supply, measurement or transmission lines.



For more information circle **29** on inquiry card

PETROMETER CORPORATION

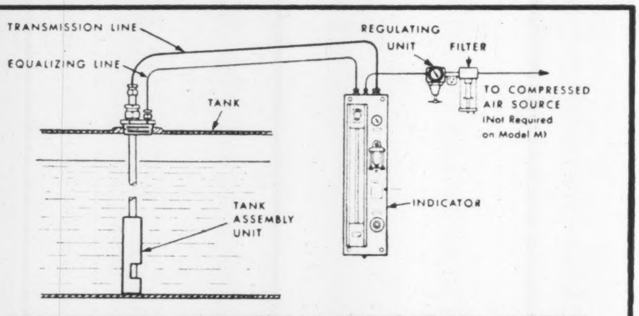
43-22 Tenth St. Long Island City 1, N. Y.
Tel—STillwell 4-8042

Petrometer Remote Reading LIQUID DEPTH GAUGES

SERIES 1400

For Accurate, Reliable Measurement of Depth of Liquid in Storage Tanks and Process Vessels. Operates on the principle of hydrostatic pressure... No moving parts... No electrical connections. Gives true reading of contents of tanks above or below the ground.

The Petrometer Industrial Indicating System consists of 5 basic parts: (1) The Indicator, (2) The Tank Assembly Unit, (3) A copper tube transmission line, (4) A copper equalizing line and (5) A manual or automatic source of compressed air for purging the transmission line.

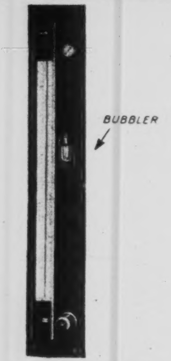


PETROMETER INDUSTRIAL INDICATING SYSTEM

FOUR *NEW* MODELS TO CHOOSE FROM . . .

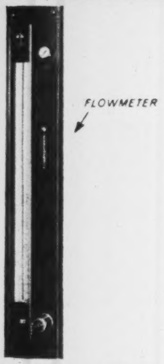
MODEL 1400 A

Equipped with aerator valve for semi-automatic indication.



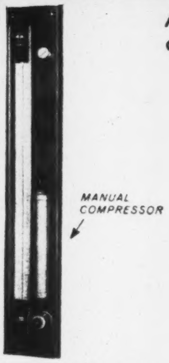
MODEL 1400 B

Equipped with bubbler to give visable evidence of continued aeration. Readings are automatic.



MODEL 1400 F

Equipped with flowmeter in lieu of bubbler.



MODEL 1400 M

Equipped with manual compressor for installations where there is no source of compressed air.

All 1400 Models are obtainable in 8 types for different tank depths.

All Petrometer Series 1400 Models, A, B, F and M have these design features:

(1) "Sealed In" Indicating Liquid. Cannot spill during transit.

(2) A one-piece extruded aluminum indicating unit with separate channels for scale and window.

(3) All functional parts are contained on the instrument panel — none on the mounting plate or as separate units.

(4) Easy Installation. Simply mount back cover on wall and plug the instrument panel into the female receptacles for quick-lock fastening.

Send For Bulletin 6004A

HOW TO SELECT THE *Right* GAUGE . . .

KEY NUMBER	TYPE	INDICATING FLUID
1 to 64	442	RED-X
65 to 96	443	RED-X
97 to 120	444	RED-X
121 to 144	445	RED-X
145 to 164	446	RED-X
165 to 270	552	MERCURY
271 to 410	553	MERCURY
411 to 520	554	MERCURY
521 to 610	555	MERCURY

To determine the right type:

1. Multiply the vertical depth of the tank in inches by the Specific Gravity of the liquid. This result is the key number.

2. Using the key number select the correct type from the table.

To determine the right model:

1. If compressed air is available select one of 3 models, A, B or F, described above.

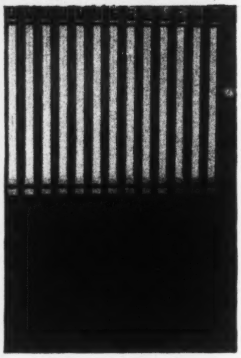
2. If no compressed air is available use Model M. Tank assemblies available in brass, stainless steel, Monel, nickel, aluminum, lead, black iron, uscolite plastic. Transmission and Equalizer tubing available in multiples of 10 feet.

MULTI-GAUGE PANEL UNITS

Build Your Own Systems

Petrometer Series 1400 Indicators can be obtained in multiple units incorporated on a single panel and mounting plate to meet your specifications. Ideal for central control systems.

Petrometer Indicating Units, component parts can be purchased separately. Unique, easy-to-install design features of all components simplify panel construction. Ask for information.



For more information circle 30 on inquiry card.

For further details

For further details concerning products listed in advertisements CIRCLE THE NUMBER corresponding to that which appears at the foot of the ad. If the card has already been used, mark the number on a postal card and send c/o our reader service department.

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Company ....

Company Address.............................. **City**.............................. **Zone**.................. **State**..................

Products Manufactured ....

☐ **Check for address change. Show OLD address here:** ....

Advertised Products

1	21	41	61	81	101	121	141	161	181	201	221	241	261	281	301	321	341	361	381
2	22	42	62	82	102	122	142	162	182	202	222	242	262	282	302	322	342	362	382
3	23	43	63	83	103	123	143	163	183	203	223	243	263	283	303	323	343	363	383
4	24	44	64	84	104	124	144	164	184	204	224	244	264	284	304	324	344	364	384
5	25	45	65	85	105	125	145	165	185	205	225	245	265	285	305	325	345	365	385
6	26	46	66	86	106	126	146	166	186	206	226	246	266	286	306	326	346	366	386
7	27	47	67	87	107	127	147	167	187	207	227	247	267	287	307	327	347	367	387
8	28	48	68	88	108	128	148	168	188	208	228	248	268	288	308	328	348	368	388
9	29	49	69	89	109	129	149	169	189	209	229	249	269	289	309	329	349	369	389
10	30	50	70	90	110	130	150	170	190	210	230	250	270	290	310	330	350	370	390
11	31	51	71	91	111	131	151	171	191	211	231	251	271	291	311	331	351	371	391
12	32	52	72	92	112	132	152	172	192	212	232	252	272	292	312	332	352	372	392
13	33	53	73	93	113	133	153	173	193	213	233	253	273	293	313	333	353	373	393
14	34	54	74	94	114	134	154	174	194	214	234	254	274	294	314	334	354	374	394
15	35	55	75	95	115	135	155	175	195	215	235	255	275	295	315	335	355	375	395
16	36	56	76	96	116	136	156	176	196	216	236	256	276	296	316	336	356	376	396
17	37	57	77	97	117	137	157	177	197	217	237	257	277	297	317	337	357	377	397
18	38	58	78	98	118	138	158	178	198	218	238	258	278	298	318	338	358	378	398
19	39	59	79	99	119	139	159	179	199	219	239	259	279	299	319	339	359	379	
20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360	380	

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13	33	53	73	93	113	133	153	173	193	213	233	253	273	293	313	333	353	373	393
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17	37	57	77	97	117	137	157	177	197	217	237	257	277	297	317	337	357	377	397
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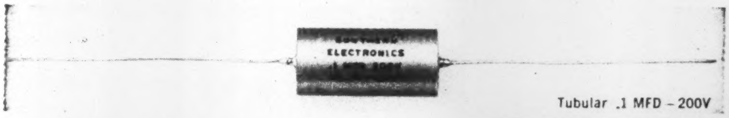
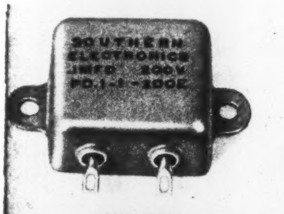
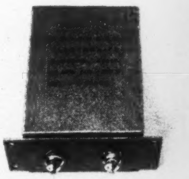
where precision counts — it's S.E.C. first!

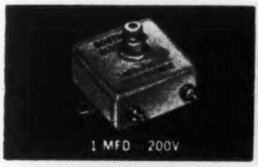
PLASTIC PRECISION CAPACITORS

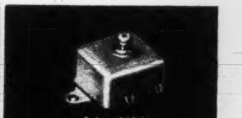

Tubular .1 MFD – 200V

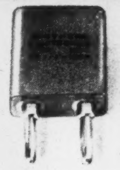

.1 MFD – 200V


10 MFD ± 1% 200V
(4⁷⁄₁₆ x 3¹⁄₁₆ x 2⅛)

5 MFD 100V (1¾ x 1¼ x 1⅛)


1 MFD 200V


Adjustable
(1³⁄₁₆ x 1¹⁄₁₆ x 11¹¹⁄₁₆)


Plug in (1 MFD – 150V)

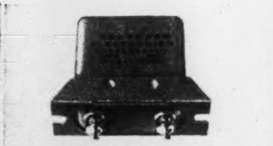
1. POLYSTYRENE

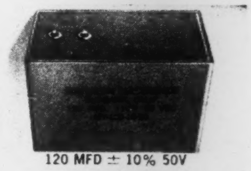
[illegible]

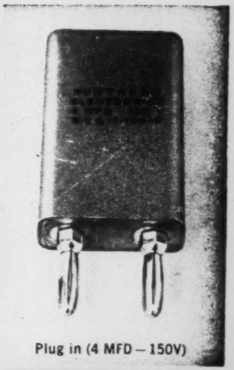
2. POLYESTER

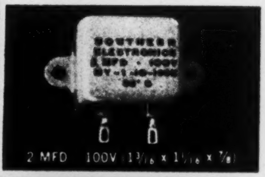
with these outstanding properties:

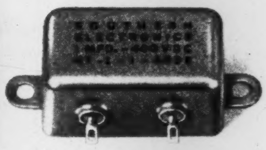
- Tolerances as close as 1%
- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]


4 MFD – 300V (2 x 2 x 1)


120 MFD ± 10% 50V

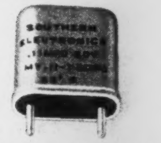

Plug in (4 MFD – 150V)

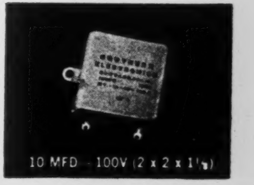

2 MFD 100V (1³⁄₁₆ x 1¹⁄₁₆ x ⅞)


1 MFD – 400V (1¾ x 1¼ x 1)

01 Tubular (175 x ¾)

1 Tubular (312 x 1)


Printed Circuit Small .11 MFD – 50V


10 MFD 100V (2 x 2 x 1⅛)

SOUTHERN
ELECTRONICS
INTEGRATED
FEED-BACK

3. RC NETWORKS

- Close tolerances
- Hi-grade precision resistors
- [illegible]
- Meet all specs

S.E.C. PRODUCTS HAVE BEEN SPECIFIED IN [illegible]

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ELECTRONICS
Corporation

For your most exacting requirements — always specify S.E.C.
150 West Cypress
New District Office: 1186 Broadway, New York City
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PIONEERS IN CUSTOM PRECISION CAPACITOR ENGINEERING

For more information circle 15 on inquiry card.

ARNOUX

SYMBOL OF PRECISION IN ELECTRONICS

Wherever found, the Arnoux symbol means precision. Precision in performance through better engineering, manufacturing, and quality control. Write for bulletins listed, additional information, or about your individual needs . . . and discover Arnoux's *Precision in Electronics.*

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precision instrumentation

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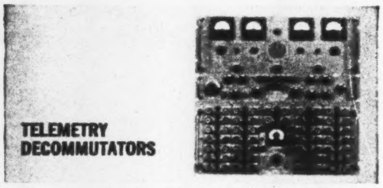
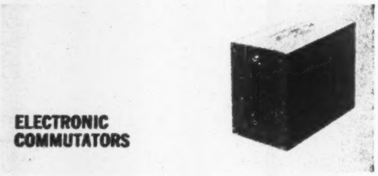


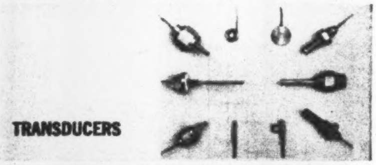
TELEMETRY DECOMMUTATORS

Complete 30-, 45-, 60- and 90-channel decommutation systems for mobile and rack-mounted telemetry receiving stations. Accepts both PAM and PDM standard IRIG inputs at rates from 75 to 900 pps. Insensitive to SCO and discriminator zero shift. Excellent noise rejection. Integral operational simulator. Accessories virtually adaptable to any application. Bulletin 800.



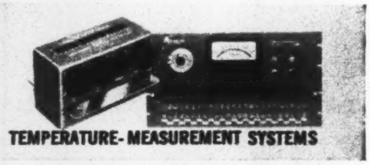
ELECTRONIC COMMUTATORS

PAM and PDM models for standard IRIG rates and channel capacities. High reliability; guaranteed 5000-hour service-free life. Commutator-generated noise not measurable. Very low power requirements. Fully qualified to Specification MIL-E-5272A. Bulletin 700.



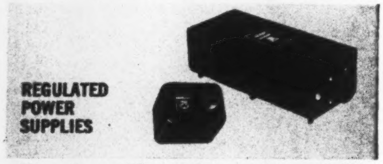
TRANSDUCERS

Resistance-type temperature transducers, in many configurations, measure temperatures of surfaces, fluids, air, electronic components, etc. Ranges cover −320°F to 2000°F; nominal resistance 100-20,000 ohms. High-resistance units give output without amplification of 0-5v. Bulletin 300.



TEMPERATURE-MEASUREMENT SYSTEMS

Airborne or rack-mounted subsystems use resistance-type transducers to measure temperatures in missiles, aircraft, rocket test stands, nuclear reactors, etc. Models using high-resistance transducers give 0-5v output without amplification for 150°F span. New transistorized models give 0-5v output for 75°F span with 100-ohm transducers. Models range from 1-25 channels capacity. Bulletin 500.



REGULATED POWER SUPPLIES

Magnetic-amplifier and transistor regulated ac/dc and dc/dc airborne types meet military specifications. Single and balanced dual outputs. Wide variety of standard models; specials to your requirements.

High-voltage series, for powering telemetry systems, dc amplifiers, guidance systems, communication equipment, etc. Bull. 200.

Low-voltage series supply precision transducer excitation and reference voltage to instrumentation systems. Bulletin 101A.

For more information circle **32** on inquiry card.

about this 1959
Instruments and Automation
BUYERS' GUIDE

This 1959 I&A Buyer's Guide is the 16th edition of a directory which has assumed a position as the most complete and authoritative source for instruments and automation (control) equipments. It contains two basic parts:

1. Index Section—telling "who makes what." Here, all instruments and control equipments are listed alphabetically, giving the names of all manufacturers who make, let us say, "Pressure Recorders."

Indexing System—all listings are made by basic variable. In other words, look for "pressure," "temperature," "flow," "level," "analytical instruments," etc. DO NOT look for "instruments," "gages," "meters," "indicators," etc., except for the special case of general-purpose instruments, such as "Recorders." This new approach—a listing by variable—has necessitated a complete revamping of the previous indexes—and will necessarily produce a few omissions for which we beg the reader's indulgence. They will be ironed out as we discover them and as you tell us about them.

2. Address Section—telling the address of the company desired as a source for the equipment located in the Index Section. Here you will find the addresses of about 3200 companies. When seeking a specific item, it will pay to drop a note to all the companies listed as sources for the item desired. Each has its specialties and specialized features.

Further Service—if you cannot locate the product or the manufacturer, or if you are seeking a rare or exotic instrument, refer your problem to our Reader Service Department, Instruments Publishing Company, 845 Ridge Avenue, Pittsburgh 12, Pa.

INDEX SECTION

ABRASION MACHINES and TESTERS

Amer. Instr. Co.
Amthor Testing
Atlas Electric Devices
Bachmann Co., Eric R.
Baldwin-Lima-Hamilton
Custom Scientific Insts.
Fidelity Mach. Co.
Gardner Laboratory
GE
Larson Instr. Co.
Morehouse Machine Co.
Olsen Testing Machine
Pacific Scientific
Riehle Div.
Scott Testers, Inc.
Shawmut Engrg. Co.
Soiltest, Inc.
Suter, Alfred
Taber Instr. Corp.
Testing Machines, Inc.
Tensitron, Inc.
Universal Aviation
U. S. Testing Co.

ABRASIVE DISCS

Armour & Co.
Baker & Co.
Black & Decker Mfg.
Blanchard Mach. Co.
Carborundum Co.
Chicago Wheel & Mfg.
Cratex Mfg. Co.
Dixon, Inc.
DoAll Co.
Engis Equipt. Co.
Fish-Schurman
Hamilton Watch
Hirschmann Co.
Industrial Abrasives
Minnesota Mining & Mfg.
Pratt & Whitney
Raybestos-Manhattan
Spaulding Fibre Co.
Stow Mfg. Co.
U. S. Rubber
White Dental Mfg.

ABSOLUTE PRESSURE, see Pressure, Absolute

ABSORPTIONMETERS

Amer. Res. Corp.
Biddle Co.
Brabender Corp.
Brush Instruments
Burrell Corp.
Gurley, W. & L. E.
Hallikainen Instruments
Humboldt Mfg. Co.
Jarrell-Ash
Minneapolis-Honeywell
  Rubicon Instrs.
Mohawk Electronic
Nankervis Co.
Penn Optical & Instr.
Phoenix Prec. Instr.
Photovolt Corp.
Precision Scientific
Special Instruments Lab.
Testing Machines, Inc.
Williams App. Co.

ACCELERATORS, Linear and Rotational

Associated Testing Labs.
Bendix Aviation Corp.
Burton Mfg. Co.
Cal-Ohm Labs.
Cedar Engrg., Inc.
Chicago Aerial Industs.
Control Data Corp.
Crescent Engrg. & Res.
Donner Scientific
Edcliff Instruments
Engis Equipt. Co.
Erwood, Inc.
Ford Instr. Co.
GE X-Ray Dept.
Genisco Inc.
Globe Industries
Greenleaf Mfg.
High Voltage Engrg. Corp
Kay Electric
Kollsman Instr. Corp.
Miljan, Inc.
Parabam, Inc.
Rahm Instrs.
Ram Meter, Inc.
Sanders Associates
Schaevitz Engineering
Statham Instrs.
Varian Associates

ACCELEROMETERS, Linear

Aero Electronics
AiResearch Mfg. Co.
Allied Prods. Div.
Amer. Electronics Mfg.
Arma Div.
Atlantic Research Corp.
Automatic Div.
Avion Div.
BJ Electronics
Bell Aircraft Corp.
Bendix-Pacific
Bendix, Pioneer-Central
B & F Insts.
Bourns Labs.
Brush Instruments
Burton Mfg. Co.
Calidyne Co.
Cambridge Instr. Co.
Cedar Engrg., Inc.
Chesapeake Instr. Corp.
Chicago Aerial Industs.
Colvin Laboratories
Consol. Electrodynamics
Control Data Corp
Crescent Engrg. & Res. Co
Daystrom-Pacific
Detroit Contls., Mil Prods.
Donner Scientific
Edcliff Instruments
Electro-Mec Lab.
Electronics & Engrg. Serv.
Endevco Corp.
Enghal Enterprises
Engineering Res. Assoc.
Engrg. Res. & Devel.
Engis Equipt. Co.
Epic Inc.
Erwood, Inc.
Fairchild Cont. Corp.
Ford Instr. Co.
GE, Apparatus Sales
Genisco Inc.
Giannini & Co.
Gyroscopes, Inc.
Hathaway Instr. Co.
High Voltage Engrg.
Humphrey, Inc.
Impact Register Co.
Impact-O-Graph Corp.
Industrial Electronics
Instrument Devel. Labs.
Jack Scient. Instr. Co., Bill
Kearfott Co., Inc.
Kistler Instr. Co.
Kollsman Instr. Corp.
Leonard Inc., Wallace O.
Massa Div. of Cohu
Matisa Equipt. Co.
Maxson Instr. Div.
Metrolog Corp.
Minatron Corp.
Minneapolis-Honeywell,
  Boston Div.
Mohawk Electronics
Norden-Ketay
Northam Electronics
Pace Engrg. Co.
Pacific Scientific
Rahm Instruments
Ram Meter, Inc.
Reeves Instr. Corp.
Rutico, Inc.
Sanders Assocs.
Schaevitz Engineering
Scientific Enterprises
Scott, Inc., Hermon Hosmer
Servomechanisms, Inc.
Sprengnether Instr.
Statham Instrs.
Sterling Prec. Instr.
Summers Gyroscope
Ten Bosch, Inc.
Topp Industries
Ultradyne Engrg. Labs.
Van Dyke Insts.
Vectron, Inc.
Vibra Shock Corp.
Wiancko Engrg. Co.

ACCELEROMETERS, Rotational

Aero Electronics
AiResearch Mfg. Co.
Allied Products Div.
Atlantic Research Corp.
B & F Instrs., Inc.
Belock Inst. Corp.
Bendix Aviation Corp.
Bourns Labs.
Cambridge Instr. Co.
Cedar Engrg., Inc.
Chesapeake Instr. Corp.
Chicago Aerial Industs.
Consol. Electrodynamics
Control Data Corp.
Cox Instruments
Crescent Engrg. & Res.
Daystrom-Pacific
Detrot Contls., Mil Prods.
Donner Scientific
Edcliff Instruments
Erwood, Inc.
Fairchild Cont. Corp.
Flight Research Engrg.
GE, Apparatus Sales
Gaertner Scientific Corp.
Genisco Inc.
Giannini & Co.
Globe Industries
Gulton Industries
Gyroscopes, Inc.
Hathaway Instr. Co.
Humphrey, Inc.
Instr. Dev. Labs.
Jack Scient. Instr. Co., Bill
Kay Electric
Kearfott Co., Inc.
Kistler Instr. Co.
Kollsman Instr. Corp.
Lear, Inc.
Massa Div. of Cohu
Metrolog Corp.
Minneapolis-Honeywell,
  Aeronautical Div.
  Boston Div.
Norden-Ketay
Pacific Scientific Co.
Ram Meter, Inc.
Reed Research
Reeves Instr. Corp.
Sanders Associates
Schaevitz Engineering
Scientific Enterprises
Square D Co.
Statham Dev. Corp.
Statham Instrs.
Sterling Prec. Instr. Corp
Summers Gyroscope
Trans-Sonics, Inc.
U. S. Time Corp.
Vectron, Inc.
Wiancko Engrg. Co.

ACIDIMETERS, see pH

ACOUSTIC STANDARDS, see Standards, Acoustic

ACOUSTIMETERS, see Sound Indicators

ACTUATORS, Electric, see Motors, also Solenoids

ACTUATORS, Hydraulic and Pneumatic, see Cylinders, also Motors, also Valve-Operating Devices

ADHESION TESTERS, including Glue-Testers

Central Scientific
Dillon & Co.
Fish-Schurman
Gardner Lab.
Koehler Instr. Co.
Moore Corp., John B.
Olsen Testing Machine
Physicists Research
Scott Testers, Inc.
Testing Machines, Inc.
Thwing-Albert
U. S. Testing Co.

AERATORS for Bulk Material Flow

Bin-Dicator Co.

AEROGRAPHS

Alden Products
Alfax Paper & Engrg.
Avion Div.
Bendix, Eclipse-Pioneer
Instruments Corp.
Kollsman Instr. Corp.
Matisa Equipt. Co.

AEROMETERS

Bendix Aviation Corp.
Edcliff Instruments
Instruments Corp.
Moeller Instr. Co.
Norden-Ketay

AGATE and AGATE SPECIALTIES

Brazilian Trading Co.
Gatti Inc., Aurelo M.
Imetra Co., Ltd.
Keller & Co.
King Gem Co.
Powers, George
Regal Instr. Co.
Vallorbs Jewel Co.

AIR ANALYSIS APPARATUS, see Air Pollution, also air Particle Size, also Gas Analyzers, Air

AIR CLEANERS, Instrument

Adams Co., R. P.
Anders Lykens
Air-Maze Corp.
Anderson Co.
Bellows Co.
Bendix Aviation Corp.
Bendix, Pioneer-Central
Briggs Filtration Co.
Conoflow Corp.
Cuno Engrg. Co.
Dollinger Corp.
Foxboro Corp.
Hankison Corp.
Industrol Corp.
Johnson Corp.
Kahn & Co.
Kemp Mfg.
Lab Constr. Co.
Lennard Co.
Logan Engrg. Co
Mason-Neilan
Metal Textile Corp.
New Jersey Meter Co.
Norgren Co.
Passaic Analytical Labs.
Phoenix Prec. Instr.
Pittsburgh Lectrodryer
Pritchard & Co.
Radax Corp.
Robbins Aviation
Schaevitz Engineering
Schrader's Sons, A.
Selas Corp. of Amer.
Staplex, Air Sampler Div.
Van Products Co.
Watts Reg. Co.
Wheelabrator Corp.

AIR COMPRESSORS, Instrument

AiResearch Mfg. Co.
Bellows Co.
Cooper Co., Clark
Dalmo Victor Co.
Dumore Co.
Gallien, R. P.
Gast Mfg. Co.
Haydu Bros.
Ingersoll-Rand
Johnson Service Co.
Joy Mfg.
Kistler Instr. Co.
Lammert & Mann
Lavoie Labs.
Little, Inc., Arthur D.
Minneapolis-Honeywell
Nash Engrg. Co.
Norden-Ketay
Penna. Pump & Compr. Co.
Powers Regulator Co.
Sawyer Bailey Corp.
Star-Martin Gage Co.
Stratos Div.
Trerice Co., H. O.
U. S. Gauge Div.
Westinghouse Air Brake Co.
White Dental Mfg. Co.
Worthington Corp.

AIR DISTANCE INDICATORS, RECORDERS, see Aircraft Instruments, also Navigation Aids

AIR DRYERS, INSTRUMENT, see Dryers, Air or Gas, also Air Cleaners

AIR FLOWMETERS, see Anemometers, also Flowmeters

AIR METERS, see Flowmeters, Positive Displacement

AIR PARTICLE SIZE INSTRUMENTS (see also Particle Instruments)

Amer. Instr. Co.
Amer. Mach. & Foundry
Bush Assoc., G. F.
Dietert Co.
Fisher Scientific
GE, Apparatus Sales
Hill & Co., E. Vernon
Mine Safety Appliances

CLEAN AIR OUTLET
HANKISON CORPORATION
CONDENSIFILTER
DISPOSABLE FILTER CARTRIDGE
IMPROVED INTEGRAL CONDENSER
ENCLOSED MAG-PNEU-POWER TRAP

HANKISON CONDENSIFILTERS

REDUCE *maintenance* MAINTAIN *accuracy*

in pneumatic instruments, controls, and machinery

- CONDENSE oil and moisture vapors—for maximum protection of pneumatic systems
- SEPARATE entrained liquids—preventing corrosion and sluggish equipment
- FILTER contaminant solids—scale, rust, dirt, with disposable cartridge
- DISCHARGE all condensates and entrainments with built-in automatic Mag-Pneu-Power Trap

Capacities: M-100T, 100 scfm at 100 psig; M-30T, 30 scfm at 100 psig. Both models of rugged construction, require only 1 hour per year servicing.

4 units in 1
- Separator
- Condenser
- Filter
- Trap

WRITE FOR BULLETIN 4158

HANKISON CORPORATION

College & Pike Canonsburg, Penna.

For more information circle 33 on inquiry card.

COMPRESSED AIR DRYERS AND CLEANERS

Van-Air
DRY AIR
VAN-AIR

Van-Air DRYER

OPERATES FOR LESS THAN 2 CENTS PER 12,000 CUBIC FEET

VAN-AIR DRYERS purify raw compressor air — extract water up to 1.07 lbs. per 1000 cu. ft. — reduce moisture to ZERO-dewpoint — remove contaminating bacteria, scale, etc. — deliver air uniformly clean and dry.

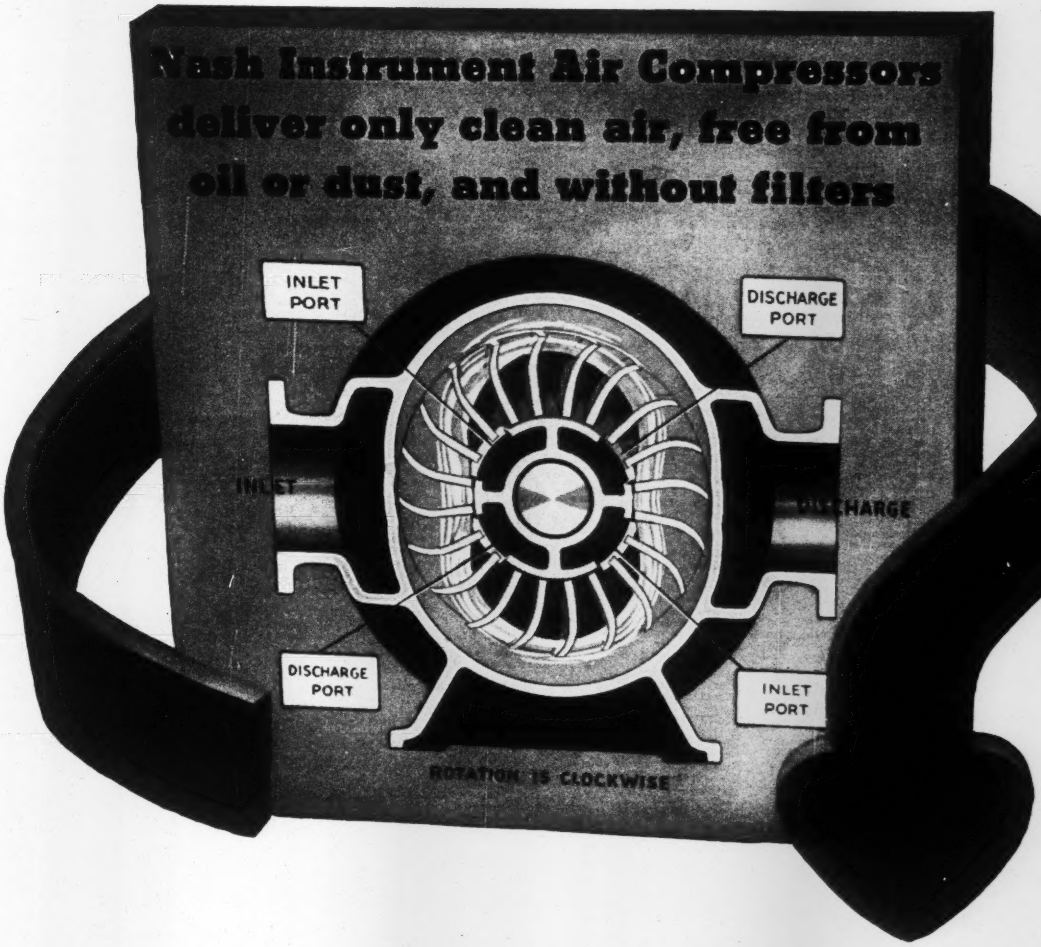
VAN-AIR DRYERS have no elements to heat, regenerate or regulate — average ten minutes care per month — process air automatically with a non-corrosive desiccant (see diagram) — operate with less than 1% pressure drop.

Many plants, shops and labs use the VAN-AIR to protect instruments, testers, circuits, etc. Others use it to prevent fouling of chemicals, compounds, plastics, foods, drugs, etc. Some need it to reduce spoilage in product finishing, spraying, blasting, packaging, assembling, etc. VAN-AIR DRYERS are built in various sizes.

Capacities range from small 10 scfm units to large vessels for entire plant output — up to 8000 scfm and 6000 psig. Write for brochure.

VAN PRODUCTS CO. • MFRS.
5755 SWANVILLE ROAD, ERIE, PA.

For more information circle 34 on inquiry card.


Nash Instrument Air Compressors deliver only clean air, free from oil or dust, and without filters
INLET PORT
DISCHARGE PORT
INLET
DISCHARGE
DISCHARGE PORT
INLET PORT
ROTATION IS CLOCKWISE

Here is Why!

You can dispense with oil filters and dust filters when you install ®Nash® Clean Air Compressors. You can save the cost of maintaining these devices. You can greatly reduce instrument maintenance costs. For the Nash employs no internal lubrication, therefore no troublesome oil is in the delivered air. Moreover, air from a Nash is thoroughly washed and cooled as it passes thru the pump. Dust in the plant atmosphere, even fly ash, is immediately removed.

®Nash® Clean Air Compressors are simple, with only one moving element. No valves, gears, pistons, sliding vanes, or other enemies of long life and constant performance complicate a Nash. No aftercoolers are needed. You will find it profitable to investigate these pumps, now.

No oil filters.
No dust filters.
No internal lubrication to contaminate air handled.
No internal wearing parts.
No valves, pistons, or vanes.
Non-pulsating pressure.
Original performance constant over a long pump life.
Low maintenance cost.

NASH ENGINEERING COMPANY
370 WILSON, SO. NORWALK, CONN.

For more information circle **35** on inquiry card.

LaBine & Co., Arthur S.
Northam Electronics
Phoenix Prec. Instr.
Process & Instruments

AIR POLLUTION INSTRUMENTS, including Samplers

Amer. Mach. & Foundry
Anton Electronics Labs.
Baldwin-Lima-Hamilton
Bausch & Lomb
Beckman Instrs.
Beckman & Whitley
Bendix-Friez
Bristol Co.
Central Scientific
Consol. Electrodynamics
Corning Glass Works
Curtiss-Wright Corp.
Devco Engineering
Electro-Mechanical Dev.
Electronic Control Corp.
Electronics Corp. of Amer.
Ercona Corp.
Falstrom Co.
Ferner Co.
Fisher Scientific
Gilmore Industries
G. M. Mfg. Co.
Greiner Glassblowing Lab.
Hastings-Raydist
Heat-Timer Corp.
Hill & Co., E. Vernon
Instruments Corp.
Jordan Electronics
Kruger Instruments
Larson Instr. Co.
Leeds & Northrup
Lennard Co.
Lucian Labs.
Mast Devel.
Microchemical Specialties
Mine Safety Appliances
Minneapolis-Honeywell,
  Rubicon Instrs.
Modern Lab. Equipt. Co
Nuclear Measmts. Corp
Nucleonic Co. of Amer.
Perkin-Elmer Corp.
Pfaltz & Bauer
Phoenix Prec. Instr.
Process & Instrs.
Radex Corp.
Reliance Instr. Mfg.
Reseach App. Co.
Royco Instruments
Sargent & Co.
Scientific Glass App.
Scientific Instr. Co.
Staplex, Air Sampler Div.
Taller & Cooper
Tracerlab Inc.
Victoreen Instr. Co.
Zeiss, Inc., Carl

AIR RECEIVERS, including Receiver-Dryers

B-I-F Industries
Cooper Dev. Corp.
Daven Co.
Johnson Service Co.
Joy Mfg.
Ingersoll-Rand
Kahn & Co.
Penn. Pump & Comp. Co.
Robbins Aviation
Spivey, Inc., James S.
Van Products Co.
Warren Bros. Mfg. Co.
Westinghouse Air Brake
Worthington Corp.

AIR SAMPLERS, see Air Pollution

AIR VELOCITY METERS, see Anemometers, also Aircraft Instruments

AIRCRAFT FLIGHT ANALYZERS

Aero Electronics
Airborne Instruments Lab.
Aircraft Electronics
Autoflight Insts. Div.
Avion Div.
Bendix Aviation Corp.
Benson-Lehner
Brush Instruments
Cal-Tronics
Carroll Co.
Collins Radio
Consol. Electrodynamics
Cook Electric
Electronic Assocs.
Electronic Tube Corp.
Farrand Optical
GE
General Mills Inc.
Geotechnical Corp.
Goodyear Aircraft
Gordon Enterprises
Hathaway Instr. Co.
Heiland Div.
Impact-O-Graph Corp.
Impact Register Co.
Lab-Tronics
Land-Air Inc.
Leeds & Northrup
Librascope
Matisa Equipt. Co.
Maxson Corp.
Minneapolis-Honeywell,
  Boston Div.
Norden-Ketay
Northrop Anaheim
Pacific Scientific
Reeves Instr. Corp.
Servo Corp. of Amer.
Spivey, Inc., James S.
Techno Instr.
Testa Mfg.
Topp Industries
Ultradyne Engrg. Labs.
U. S. Gauge Div.
Waldorf Instr. Co.
Wallace & Tiernan, Inc.

AIRCRAFT INSTRUMENT TESTERS

Abrams Instr. Corp.
Aero Electronics Co.
Aircraft Radio Corp.
AiResearch Mfg. Co.
All-Tronics
Amer. Mach. & Foundry
Amer. Paulin System
Amer. Research
Amthor Testing Instr.
Autron Engrg., Inc.
Avien, Inc.
Baldwin-Lima-Hamilton
Bellmore Gear Corp.
Bendix, Eclipse-Pioneer
Bendix, Pioneer Central
B & H Instr. Co.
Bogue Electric
Boonton Radio
Borden Engrg. Div.
Burton Mfg. Co.
Bush Assocs.
CDC Control Services
Cal-Tronics Corp.
Collins Radio Co.
Consolidated Avionics
Control Data Corp.
Davenport Mfg. Co.
Daystrom-Pacific
Decker Corp.
DuMont Labs., Allen B.
Electro, Instr., Inc.
Engrg. & Res. Corp.
Erdco Engrg. Co.
Gadgets, Inc.
Gates Electronic Co.
GE, Apparatus Sales
Genl. Hermetic Sealing
Genisco Co.
Gray Instr. Co.
Green Rectifier Co.
Guardian Elec. Mfg.
Hass Bros. Instr. Co.
Hathaway Instr. Co.
Hewson Co.
Hoffman Engrg.
Howell Instr. Co.
Ideal-Aerosmith
Ideal Lab. Tool
Instr. Assocs.
Intercontinental Dynamics
Internat. Radiant Corp.
Jaeger Watch
Jordan Electronics
Kahn & Co.
Kearfott Co., Inc.
Kearfott Co., Western Div.
King Engrg.
Kollsman Instr. Corp.
Lewis Engrg. Co.
Liquidometer Corp.
Manning, Maxwell & Moore
Mansfield & Green
Meriam Instr. Co.
Metrolog Corp.
Micro Gee Prods.
Murphy & Miller
Nankervis Co.
Natl. Inst. Labs
Northrop Anaheim
Opad Electric
Optimized Devices
Orban Co., Kurt
Pioneer Instr. Co.
Radio Frequency Labs.
Ram Meter, Inc.
Seaboard Elect. Prod.
Simpson Electric
Specialties, Inc.
Standard Products
Sun Electric Corp.
Task Corp.
Technical Electronics Corp.
Tenney Engrg. Co.
Thwing-Albert
Transval Engrg. Corp.
Trimount Instr. Co.
Triplett Electcl. Instr.
Trott Electronics
United Mfg. Co.
Veeco Vacuum Corp.
WacLine, Inc.
Waldorf Instr. Co.
Walker Div.
Wallace & Tiernan
Wolfe & Mann

AIRCRAFT INSTRUMENT TOOLS

Advanced Electronics Inc.
Aircraft Electronics Assocs.
Airdraulics Engineering
Amer. Instr. Co.
Bellmore Gear Corp.
Bendix, Eclipse-Pioneer
Bendix, Pioneer Central
Burndy Engrg. Co.
Cal-Tronics Corp.
Cedar Engrg., Inc.
Decker Corp.
Dixon, Inc.
Engis Equipt. Co.
Farrand Optical
Gadgets, Inc.
GE, Apparatus Sales
Ideal-Aerosmith
Industrial Engrg. Corp.
Instr. Assocs.
Jo-Line Tools
Kollsman Instr. Corp.
Lenox Instrument Co.
Lewis Engrg. Co.
Marshall Co.
Nilsson Gage Co.
North Amer. Instr. Co.
PIC Design Corp.
Progressive Service Co.
Radio Frequency Labs.
Sheffield Corp.
Sperry Gyroscope
Standard Products, Inc.
Starrett Co., L. S.

AIRCRAFT INSTRUMENTS, including Airspeed Indicators, Altimeters, Artificial Horizons, Automatic Pilots, Ice Alarms, Inclinometers, Intervalometers, Rate of Climb Instruments, Turn and Bank Indicators (see also Navigation Aids, also Radar)

Abrams Instr. Corp.
Ace Electronics
Advanced Electronics, Inc.
Aero Electronics
Aero Research
Aeroquip Corp.
Airborne Instruments Lab.
Aircraft Electronic Assocs.
Airdraulics Engrg. Co.
Airflo Instr. Co.
AiResearch Mfg.
Alden Electronic
Allard Instruments
All-Tronics
Amer. Electroneering
Amer. Electronics
Amer. Meas. Insts.
Amer. Paulin System
Amer. Res. Corp.
Anemostat Corp.
Arma Div.
Atlantic Research Corp.
Automatic Temp. Control
Autonetics Div.
Aviation Engineering
Avien, Inc.
Avion Div.
Avionic Products
Bailey Meter Co.
Barton Instr. Co.
Beattie-Coleman, Inc.
Bell Aircraft
Bellmore Gear Corp.
Bendix, Eclipse-Pioneer
Bendix-Friez
Bendix, Pioneer Central
Boonton Radio
Borden Engrg. Div.
Bruno-N. Y. Indust.
Builders-Providence
Burton Mfg.
Cardinal Instrumentation
Carroll Co.
Cedar Engrg., Inc.
Chatham Conts. Corp.
Chicago Aerial Industs.
Coleman Instruments
Collins Radio
Colvin Labs.
Consolidated Avionics Corp.
Control Specialists, Inc.
Cook Electric
Custom Scient. Insts.
Datran Electronics
Daystrom Instrument
Daystrom-Pacific
Donner Scientific
Edcliff Instruments
Edison, Inc., Thomas A.
Electro-Mec Lab.
Electronic Assocs.
Electronic Communication
Electronic Specialty Co.
Engineering & Res. Corp.
Engis Equipt. Co.
Engler Instr. Co.
Fairchild Controls Corp.
Farnsworth Electronics
Fecker, Inc.
Federal Telephone & Radio
Feedback Controls
Ferner Co.
Fish-Schurman
Flight Research Engrg.
Flow Corp.
Ford Instr. Co.
Fulton-Sylphon Div.
G. M. Mfg. Co.
Gadgets Inc.
Geier & Bluhm
GE
General Mills Inc.
Genisco Inc.
Giannini & Co.
Goodyear Tire
Gordon Enterprises
Gorrell & Gorrell
Guardian Electric
Hanson-Gorrill-Brian
Hastings-Raydist
Hathaway Instr. Co.
Haydon Co., A. W.
Helipot Div.
Hickok Electrical Instr.
Humphrey, Inc.
Ideal-Aerosmith
Ideal Lab. Tool
Illinois Testing Labs.
Impact Register Co.
Industrial Test Equipt.
Instr. Assocs.
Jaeger Watch
Jarvis Electronics
Karnish Instr. Sales
Kearfott Co.
Kearfott Co., Western Div.
Kollsman Instr. Corp.
Lear, Inc.
Leslie Co.
Lewis Engrg. Co.
Liquidometer Corp.
Lucian Labs.
Machlett & Son
Magnetic Amplifiers Inc.
Manning, Maxwell & Moore
Marion Electcl. Instr.
Mason-Neilan Div.
Mast Devel.
Matisa Equipt. Co.
Maxson Corp.
Meriam Instr. Co.
Microloc Corp.
Midwestern Instruments
Minneapolis-Honeywell
Minneapolis-Honeywell,
  Boston Div.
Moeller Instr. Co.
Natl. Aircraft Corp.
Norden-Ketay
North Amer. Instr. Co.
North Atlantic Industs.
Oster Mfg. Co., John
Pacific Labs.
Penn Indust. Instr. Corp.
Rahm Instruments
Raytheon Mfg. Co.
Reeves Instr. Div.
Refinery Supply
Republic Mfg. Co.
Revere Corp. of Amer.
Ribble Engrg. Co.
Rochester Mfg.
Seaboard Elec. Prod.
Sensitive Research Instr.
Serdex, Inc.
Servo Corp. of Amer.
Servomechanisms, Inc.
Servonic Instrs., Inc.
Sheffield Corp.
Simmonds Aerocessories
Simplex Valve & Meter
Simpson Electric
Slip Ring Co. of Amer.
Specialties, Inc.
Sperry Gyroscope
Standard Products Inc.
Starrett Co.
Streeter-Amet
Summers Gyroscope
Taller & Cooper
Task Corp.
Tejax Engrg. Corp.
Televiso Co.
Ten Bosch Inc.
Tenney Engrg. Co.
Texas Instrs., Inc.
Thermo-Elect. Co.
Topp Industries
Transval Engrg. Corp.
Trimount Instr. Co.
Triplett Electcl. Instr.
U. S. Gauge Div.
Vectron, Inc.
Victory Engrg.
WacLine, Inc.
Wakmann Watch Co.
Waldorf Instr. Co.
Wallace & Tiernan
Wang Labs.
Warren-Knight
Waugh Labs.
West Coast Electronics
Westburg Mfg.
Westinghouse Electric
Weston Instrs.
Westport Electric
White Co., David
Whittaker Gyro Div.
Wiancko Engrg. Co.
Winslow Co.
Zernickow Co.

AIRCRAFT NAVIGATIONAL INSTRUMENTS, see Navigation Aids

AIRCRAFT POWER PLANT INSTRUMENTS

Aero Instr. Co.
Aero Research
Aerotech Specialties
Airborne Instruments Lab.
Airflo Instr. Co.
Associated Res., Inc.
Aviation Engrg. Co.
Avien, Inc.
Avion Div.
Avionic Products Engrg.
B & H Instr. Co.
Beck Bros.
Bendix, Eclipse-Pioneer
Bendix, Pioneer Central
Bogue Electric
Boston Auto Gage Co.
Bowser Inc.
Bristol Co.
Brooks Rotameter
CDC Control Services
Colvin Labs., Inc.
Control Engrg. Corp.
Datran Electronics
DeJur-Amsco
Edison Inc., Thomas A.
Electro Prods. Labs.
Federal Telephone & Radio
GE Apparatus Sales
Gilmore Industries
Griswold Mfg.
Hasler-Tel Co.
Haydon Co., A. W.
Hays Corp.
Hewson Co.
Hickok Electcl. Instr.
Howell Instr. Co.
Instr. Assocs.
Jaeger Watch
Kistler Instr. Co.
Kollsman Instr.
Lewis Engrg. Co.
Liquidometer Corp.
Magnetic Research Corp.
Manning, Maxwell & Moore
Marion Electcl. Instr. Co.
Moisture Register Co.
Norden-Ketay
Penn Indust. Instr. Corp.
Phaostron Co.
Rahm Instruments
Ram Meter, Inc.
Revere Corp. of Amer.
Roller-Smith
Sel-Rex Corp.
Sensitive Res. Instr.
Servomechanisms, Inc.
Servonic Instr. Inc.
Sperry Gyroscope
Standard Products
Stewart-Warner
Thwing-Albert
Triplett Electcl. Instr.
Topp Industries
U. S. Gauge Div.
U. S. Taximeter
Varo Mfg. Co.
Voltron Products
WacLine, Inc.
Waugh Engrg. Co.
Westburg Mfg.
Westinghouse Electric
Weston Instrs.
Winslow Co.

AIRPLANE CONTROLS, including Movement Recorders

Aero Electronics
Airborne Instruments Lab.
Amer. Electronics
Arens Controls
Barber-Colman
Bendix, Eclipse-Pioneer
Breeze Corporations
Bristol Co.
Colvin Labs.
Consolidated Avionics
Cook Electric
Crescent Engrg. & Res. Co.
Dyna-Empire
Dynamics Res. Assoc.
Engrg. & Res. Corp.
Epsco, Inc.
Flight Research Engrg.
GE
Hamilton Watch
Hathaway Instr. Co.
Heiland Div.
Impact Register Co
Kollsman Instr. Corp.
Lear Inc.
Magnetic Amplifiers Inc.
Manning, Maxwell & Moore
Marion Electcl. Instr. Co.
Minneapolis-Honeywell,
  Boston Div.
Norden-Ketay
North Amer. Instr. Co.
Pacific Scientific
PIC Design Corp.
Radiation, Inc.
Revere Corp.
Servonic Insts.
Sheffield Corp.
Sound App. Co.
Streeter-Amet
Summers Gyroscope
Task Corp.
Teleflex, Inc.
Thermix Corp.
United Control Corp.
U. S. Gauge Div.
Victory Engrg. Corp.
WacLine, Inc.
Waldorf Instr. Co.
Western Design & Mfg
Westinghouse Air Brake Co.
Wiancko Engrg. Co.

AIRPORT INSTRUMENTS, see Aviation Instruments, Ground

AIRSPEED INDICATORS, see Aircraft Instruments

AIRSPEED INDICATOR TESTERS, see Aircraft Instruments

ALARM GAGES, see Pressure Gages with Alarms

ALARMS, Bearing Temperature, see Bearing Temperature Instruments

ALARMS, Bin Level, see Level Control, Bin

ALARMS, Carbon Bisulphide, see Gas Analyzers

ALARMS, Carbon Monoxide, Combustible Gas etc., see Gas Analyzers

ALARMS, High/low, Water, see Level Controllers, Liquid

ALARMS, Hydrogen Sulphide, see Gas Analyzers

ALARMS, Inflammable Gas, see Gas Analyzers

ALARMS, Radiation, see Radiation Alarms

ALARMS, Shaft Motion, see Switces, Rotary

ALARMS, Smoke, see Smoke Density Indicators, Recorders

ALIDADES. See Surveying Instruments

ALKALIMETERS, see pH

ALLOYS, Compensator, see Alloys, Temperature

ALLOYS, Glass Sealing

Allegheny-Ludlum
Alpha Metals
Amer. Platinum Works
Amer. Silver Co.
Bishop & Co., J.
Carpenter Steel Co.
Cerro de Pasco Corp.
Crucible Steel
Division Lead
Driver Co., Wilbur B.
Driver-Harris Co.
Federated Metals Div.
Ferner Co., R. Y.
General Plate Div.
Hermaseal Co.
Hermetic Seal
Jessop Steel
Mallory & Co., P. R.
Precision Tube Co.
Richfield Coined Prods.
Simonds Saw & Steel
Stupakoff Div.
Uhrig Co.
Westinghouse Electric
Wilson Co.

ALLOYS, High Permeability including Hipernik, Mu-metals, Permalloy, etc.

Allegheny-Ludlum
Allen-Bradley Co.
Amer. Silver Co.
Arnold Engrg. Co
Carpenter Steel Co.
Chatillon & Sons
Driver-Harris
Hamilton Watch Co
Jessop Steel Co.
Magnetics, Inc.
Pyroferric Co.
Simonds Saw & Steel
Thomas & Skinner
Universal-Cyclops
Westinghouse Electric

ALLOYS, Special, Gold Spring

Alpha Metals, Inc.
Amer. Platinum Wks.
Amer. Silver Co.
Baker & Co.
Bishop & Co., J.
Brainin Co., C. S.
Chatillon & Sons
Cohn, Corp., Sigmund
Dow Chem.
General Plate Div.
Handy & Harman
Haynes Stellite
Ney Co.
Secon Metals Corp.
Sel-Rex Corp.
Sherman & Co.
Wilson Co.

ALLOYS, Special, including Cupaloy, Duronze, Elinvar Olympic

Allied Prods. Div.
Alpha Metals, Inc.
Amer. Brass Co.
Chase Brass & Copper
Chatillon & Sons
Disston & Sons
Dow Chem.
Driver Co., Wilbur B.
Driver-Harris
Eaton Mfg. Co.
Elgin Nat'l Watch Co
Ferner Co.
Hamilton Watch
Simonds Saw & Steel
Wall Colmonoy
Westinghouse Electric
Wheaton Co.
Wilson Co.

ALLOYS, Special, including Invar, Konal, Kovar, Z-Metal

Allegheny-Ludlum
Amer. Silver Co.
Carpenter Steel Co.
Chatillon & Sons
Dow Chem.
Driver Co., Wilbur B.
Driver-Harris
Ferner Co.
General Plate Div.
Halcomb Steel
Hamilton Watch Co.
Jessop Steel
Mico Instr. Co.
Revere Copper & Brass
Simonds Saw & Steel
Stupakoff Div.
Universal-Cyclops
Westinghouse Electric
Wilson Co.

ALLOYS, Special, Magnesium

Dow Chem.
Federated Metals Div.
Hills-McCanna
North Amer. Philips

ALLOYS, Special, Nickel Silver

Alpha Metals
Amer. Brass Co.
Amer. Silver Co.
Belmont Smelt. & Ref.
Deringer Metallurgical
Driver Co., Wilbur B.
Federated Metals Div.
Gallien, R. P.
Hamilton Watch
Hubbell Metals
Mallory & Co., P. R.
Precision Tube Co
Revere Copper & Brass
Scovill Mfg.
Secon Metals Corp.
Sel-Rex Corp.
Sherman & Co.
Western Brass Mills
Wilson Co.

ALLOYS, Special, Silver Brazing

Allen Co.
Alpha Metals
Amer. Platinum Works
Amer. Silver Co.
Baker & Co.
Belmont Smelt. & Ref.
Dixon, Inc.
Driver Co., Wilber B.
General Plate Div.
Handy & Harmon
Hubbell Metals
Mallory & Co., P. R.
Metals & Controls Corp.

Ney Co.
Sel-Rex Corp
Wilson Co.

ALLOYS, Temperture Compensator

Alpha Metals, Inc.
Amer. Silver Co.
Carpenter Steel Co.
Chatillon & Sons
Driver Co., Wilbur B.
Driver-Harris
GE
Hamilton Watch
Jessop Steel
Simonds Saw & Steel
Wilson Co.

ALTIMETERS, see Barometers, Altitude

ALTIMETERS, Aircraft, see Aircraft Instruments

ALTIMETERS, Surveying, see Barometers

ALTIMETER TESTERS, see Aircraft Instruments

ALTITUDE BAROMETERS, see Barometers, Altitude

ALTITUDE GAGES (Boiler), see Boiler Room Instruments

ALTITUDE VALVES, see Valves, Relief

ALUMINUM FRAMES for Small Moving Coils

A & M Tool & Die
Dittmore & Freimuth
Falstrom Co
Precision Tube Co
Rex Rheostat
Uniform Tubes

AMMETERS, A C and/or D C, Single or Multi-range, Indicating

Amer. Metrix Corp.
Assembly Products
Associated Res. Inc
Ballantine Labs.
Barber-Colman
Beede Electcl. Instr. Co
Bendix, Eclipse-Pioneer
Bradshaw Instruments
Bristol Co.
Burton-Rogers Co
Cambridge Instr. Co.
Chicago Indust. Instr.
Columbia Elect. Mfg.
Dale Instruments
DeJur-Amsco
Dittmore & Freimuth
Electric Auto-Lite
Elect. Design & Mfg.
Electro Mechanical Div.
Electro-Mech. Instr.
Electro-Tech Equipt.
Electronic Devel. Labs.
Electronic Instr. Co.
Electronic Measmts Co.
Englehard Inc., Charles
Epic Inc.
Esterline-Angus
Ferranti Electric
Fielden Instr. Div.
Gar Electcl. Instr.
GE, Apparatus Sales
Greibach Instruments
Gulton Industries
Helipot Div.
Hickok Electcl. Instr.
Instrument Laboratories
Internatl. Instruments Inc.
J-B-T Insts.
Keithley Instrs., Inc.
Lewis Engrg. Co.
Magnetic Industries
Manning, Maxwell & Moore
Marion Elect. Inst. Co
Mastercraft Inst. Co
Meters, Inc.
Miller, M. C.
Newark Electric Co.
Niagara Electcl. Instr.
Norton Electcl. Instr.
Oltronix Co.
Pace Electcl. Instr.
Phaostron Co.
Physics Research Labs.
Pimex, Inc.
Precision App. Co
Pyramid Instr. Co.
Q. V. S., Inc.
Radio City Products
Rawson Electcl. Instr.
Rochester Mfg.
Roller-Smith
Sendur, Inc
Sensitive Res. Instr.
Shurite Meters
Simpson Electric
Sterling Mfg. Co.
Stewart-Warner
Sticht Co., Herman H.
Sun Electric
Texas Insts., Inc.
Triplett Electcl. Instr.
United Electric
United Optical
U. S. Gauge Div.
Voltron Products
WacLine, Inc.
Waters Mfg.
Welch Mfg. Co., W. M.
West Instr. Corp.
Westinghouse Electric
Weston Instr.
Wheelco Instr. Div.
Winslow Co.

AMMETERS, Clamp Type

Amer. Metrix Corp
Bristol Co.
Columbia Electric
Dale Instruments
Electronic Development
Electro-Tech Equip.
Ferranti Electric
GE, Appartus Sales
H. D. Electric
Hickok Electcl. Instr.
Martindale Electric
Pimex, Inc.
Pyramid Instr. Corp.
Rochester Mfg.
Schweitzer Mfg.
Sticht Co., Herman H.
Triplett Electcl. Instr.
United Optical
U. S. Gauge Div.
Weston Instr.

AMMETERS, Contact-making

Assembly Products
Bristol Co.
Dittmore & Freimuth
Electro-Tech Equip.
Esterline-Angus
Fielden Instr. Div.
GE, Apparatus Sales
Hickok Electcl. Instr.
Larson Instr. Co.
Lewis Engrg. Co.
Marion Electcl. Instr. Co
Phaostron Co.
Rochester Mfg.
Roller-Smith
Sensitive Res. Instr.
Simpson Electric
Tipp-Tronic, Inc.
Triplett Electcl. Instr.
United Electric
West Instr. Corp.
Westinghouse Electric
Weston Instr.

AMMETERS, Laboratory Standard

Amer. Metrix Corp.
Central Scientific
Electro-Tech Equip.
Fisher Scientific
GE, Apparatus Sales
Greibach Instruments
Gulton Industries
Hickok Electcl. Instr.
Marion Elect. Instr. Co.
Phaostron Co.
Physics Research Labs.
Radio Frequency Labs.
Rawson Electcl. Instr.
Roller-Smith
Sensitive Res. Instr.
Simpson Electric
Triplett Electcl. Instr.
United Optical
Welch Mfg. Co., W. M.
Westinghouse Electric
Weston Instr.
Will Corp.

AMMETERS, Microammeters and Milliammeters

Amer. Metrix Corp
Applied Physics
Assembly Products
Ballantine Labs
Barber-Colman
Beckman Div.
Beede Electcl. Instr
Beta Electric
Boone Instr.
Bradshaw Instruments
Bristol Co.
Burton-Rogers
Cambridge Instr. Co
Chicago Indust. Instr. Co
Clough-Brengle
Curtiss-Wright
Dale Instruments
DeJur-Amsco
Dittmore & Freimuth
Elect. Design & Mfg
Electro-Mech. Instr
Electronic Devel. Lab
Electronic Instr. Co.
Electronic Measmts. Co
Electro-Tech Equip.
Engelhard Inc., Chas
Epic Inc.
Esterline-Angus
Fed. Telephone & Radio
Fielden Instr. Div.
Fisher Scientific
Gar Electcl. Instr.
GE, Apparatus Sales
Greibach Instruments
Gulton Industries
Hewson Co.
Hickok Electcl. Instr.
Industrial Control Co
Internat. Instr. Co.
J-B-T Insts.
Keithley Instruments
Kin Tel
Leeds & Northrup
Lewis Engrg. Co.
MacDonald Co. W. S.
Magnetic Industries
Manning, Maxwell & Moore
Marion Elect. Instr. Co
Meters, Inc.
Mil Instr. Corp.
Miller, M. C.
Millivac Instr. Co.
Minneapolis-Honeywell,
  Boston Div.
Newark Electric Co.
Norton Electcl. Instr.
Oltronix Co.
Pace Electcl. Instr.
Pfaltz & Bauer
Phaostron Co.
Physics Res. Labs.
Pimex, Inc.
Precision App. Co
Pyramid Instr. Co
Q. V. S. Inc.
Radio City Products
RCA Tube
Rawson Electcl. Instr.
Reiner Electronics
Roller-Smith
Scient. Inst. Dev. Lab
Scientific Specialties
Sensitive Res. Instr.
Shallcross Mfg.
Shelby Instr. Co
Shurite Meters
Simpson Electric
Std. Science Supp.
Sun Electric
Supreme, Inc.
Technology Instr. Div.
Texas Insts., Inc.
Thwing-Albert
Tipp-Tronic, Inc.
Triplett Electcl. Instr.
Triumph Mfg.
United Electric
United Optical
WacLine, Inc.
Wallace & Tiernan
Waters Mfg.
Welch Mfg. Co., W. M.
West Instr. Corp
Westinghouse Electric
Weston Instr.
Winslow Co

AMMETERS, Recording

Amer. Mach. & Foundry
Autocall Co
Barber-Colman
Bristol Co.
Brush Instruments
Cambridge Instr. Co
Dittmore & Freimuth
Edin Electronic
Electro-Tech Equip.
Engelhard Inc., Chas.
Engrg. Enterprises
Esterline-Angus
Fed. Telephone & Radio
Fielden Instr. Div.
GE, Apparatus Sales
Geotechnical Corp.
HD Electric
Larson Instr. Co.
Leeds & Northrup
Manning, Maxwell & Moore
Minneapolis-Honeywell
Oltronix Co.
Physics Res. Labs
Precise Measmts. Co
Roller-Smith
Sanborn Co.
Sangamo Electric
Sound Apparatus
Taller & Cooper
Texas Insts., Inc.
Wallace & Tiernan
Westinghouse Electric
Weston Instr.
Wheelco Instr. Div.

AMMETERS, Split Core

Acton Labs., Inc.
Bristol Co.
Columbia Elect. Mfg.
Dale Instruments
Electro-Tech Equip.
Ferranti Electric
GE, Apparatus Sales
HD Electric
Norton Electcl. Instr.
Physics Res. Labs.
Pyramid Instr. Corp.
Roller-Smith
Rubicon Co.
Sticht Co., Herman H.
Triplett Electcl. Instr
Waters Mfg. Inc.
Weston Instr.

AMMETERS, Thermo, including Milliammeters

Assembly Products
Beede Electcl. Instr.
Bristol Co.
Cambridge Instr. Co.
Chicago Indust. Insts.
Dale Instruments
DeJur-Amsco
Dittmore & Freimuth
Electronic Devel. Lab.
Electro-Tech Equip.
GE, Apparatus Sales
Greibach Instruments
Gulton Industries
Hickok Electcl. Instr.
Lewis Engrg. Co.
Magnetic Industries, Inc.
Marion Electrical Instr.
Mastercraft Inst. Co
Meters, Inc.
Physics Res. Labs.
Pyrometer Instr. Co.
Q. V. S., Inc.
Rawson Electcl. Instr.
Roller-Smith
Sangamo Electric
Sensitive Res. Instr.
Shelby Instr. Co.
Simpson Electric
Sun Electric
Texas Instrs., Inc.
Triplett Electcl. Instr.
WacLine, Inc.
Welch Mfg. Co., W. M.
West Instr. Corp.
Westinghouse Electric
Weston Instr.

AMMONIA ANALYZERS, see Gas Analyzers

AMMONIA CONTROL EQUIPMENT

Askania Reg. Co
Autoclave Engrs.
B-I-F Industries
Bailey Meter Co.
Bastian-Blessing
Bristol Co.
Builders-Providence
Cash Valve Mfg. Corp
Dahl & Co., G. W.
Everson Mfg. Co.
Fischer & Porter Co
Foster Engrg. Co
Frick Co.
General Controls
Hammel-Dahl
Hoke, Inc.
Jo-Bell Products
Jordan Reg. Corp
Lear Inc.
Lumenite Electronic
Magnetrol, Inc.
Marsh Corp., Jas. P.
McAlear Mfg.
Mercoid Corp.
Milton Roy Co.
Natural Gas Equipt., Inc
Nelson Electric Mfg.
Phila. Thermometer Co
Proportioneers, Inc.
R. K. L. Valve & Mfg.
Research Controls
Scientific Instr. Co
Schutte & Koerting
Shallcross Controls
Star-Martin Gage Co.
Taylor Instr. Cos.
Taylor & Co., W. A.
Thermco Labs.
Wallace & Tiernan
Waukee Engrg. Co
Weston Instr.

AMPEREHOUR METERS

Assoc. Research Inc.
GE, Apparatus Sales
Hetherington & Berner
Landis & Gyr
Spivey, Inc., James S.
Sangamo Electric
Texas Insts., Inc.
Westinghouse Electric

AMPLIFIERS, Audio Frequency

ACF Electronics
Acton Labs.
Aerovox Corp.
Aircraft Radio Corp
Alcor Electronics Corp.
Allied Radio Corp.
Altec Lansing
Amer. Electronic Labs
Amer. Helicopter Div.
Amplifier Corp. of Amer.
Atlantic Res. Corp.
Authorized Mfrs. Serv.
Autom. Corp. of Amer
Avion Div.
Axler Associates
Baird-Atomic
Ballantine Labs
Bell Aircraft Corp
Berkshire Labs.
Berndt-Bach
Brit. Industries Corp
Brush Instruments
Bunnell & Co
Califdyne Co.
Calmag Div.
Cal-Ohm Labs.
Canoga Corp
Cedar Engrg. Co.
Centralab Div.
Computer Corp. of Amer
Computer Engrg. Assocs
ConRay Corp.
Consolidated Avionics
Control Corp. of Amer.
Davenport Mfg.
Daystrom Instr. Div.
Dukane Corp.
DuMont Labs., Allen B.
Dynamics Instrumentation
ElDorado Electronics
Electro Devices Inc.
Electro Mechanical Div.
Electro Voice, Inc.
Electronic Instr. Co.
Electronic Res. Assocs.
Endevco Corp.
Engineered Electronics
Engrg. Enterprises
Epsco, Inc.
Ercona Corp
Erdco Engrg. Co
Erwood, Inc.
Fed. Telephone & Radio
Femco, Inc.
Fisher Radio
Fisher Res. Lab.
Franklin Electronics
Freed Transf. Co.
Furst Electronics
Gates Radio Co.
General Radio Co.
Genzlinger, Inc.
Hammarlund Mfg. Co
Hermetic Sealing Corp.
Hewlett-Packard
Hydro-Aire, Inc.
Indust. Test Equipt. Co
Industronics
Instrument Devel. & Mfg
Instrument Laboratories
Interelectronics Corp.
Johnson Co., E. F.
K-F Devel. Co.
Kaiser Aircraft & Elect.
Kay Electric
Keithley Instruments
Kinetic Insts.
Krohn-Hite
Lear, Inc.
LEL, Inc.
Ling Electronics, Inc.
MB Mfg.
Magnavox Co.
Magnecord, Inc.
Magnetic Instr. Co.
Maurer Inc., J. A.
Munston Mfg. & Service
National Co.
Nelson Instr. Co.
Nems-Clarke
Newark Electric Co.
Peer, Inc.
Pioneer Magnetics
Precision Electronics, Inc.
Precision Radiation Insts.
Radio City Products
Radio Frequency Labs.
Radionics, Inc.
Rauland-Borg
Remler Co.
Rheem Mfg.
Sanborn Co.
Scott, Inc., Hermon Hosmer
Sierra Electronic Corp.
Sonex, Inc.
Std. Electronic Res.
Stromberg-Carlson
Taber Inst. Corp
Tarc Electronics Inc.
Technical App. Builders
Technology Instr. Corp.
Telex, E-A Div.
Thermador Electcl. Mfg.
Thordarson-Meissner
Topp Industries
Transistor Applications
Transistor Devices
Transval Engrg. Corp.
Transvision, Inc.
Tri-Dex Electronics
Trio Labs., Inc.
Trott Electronics
Varo Mfg. Co.
Vectron, Inc.
Video Instrs.
Virginia Electronics
WacLine, Inc.
Walkirt Co.
Wallson Associates
Westronics, Inc.
Wheeler Electronic Corp.
Wickes Engrg. & Const.
Yellow Springs Instr.
Zacharias Electronics

AMPLIFIERS, Chopper

Adage, Inc.
Airpax Products
Alden Elect. & Impulse
Allegany Instr. Co.
Amer. Electronics Labs.
Askania Reg. Co.
Audio Instr. Co.
Avion Div.
Bell Aircraft Corp
Beckman Div.
Berkeley Div.
Boonton Electronics
Bristol Co.
Brit. Electronic Sales
Brush Instrs.
Cal-Ohm Labs.
Computer Engr. Associates
Daven Co.
Davenport Mfg. Co.
Donner Scientific
Dukane Corp.
Dynamics Instrumentation
Edin Co.
Electro Instrs., Inc.
Electro-Mechanical Dev.
Electro Mechanical Div.
Electro-Mechanical Res.
Electro Precision
Electrol, Inc.
Electronic Assoc.
Electron. Spec. Co.
Engineered Electronics
Engrg. Enterprises
Epsco, Inc.
Feedback Controls
Franklin Electronics
GPS Instr. Co., Inc
General Communications
Hall-Scott, Inc.
Hoover Electronics Co.
Indikon Co.
Industrial Control Co.
Instrument Dev. Labs.
Jack Scient. Instr. Co., Bill
Kin Tel
Magnavox Co.
Magnetic Instr. Co.
Magnetic Research Corp.
Micro Gee Prods., Inc.
Mid-Century Instrumatic
Minneapolis-Honeywell,
  Boston Div.
  Indus. Div.
NJE Corp.
Nelson Instr. Co.
Non-Linear Systems
North Atlantic Industs.
Offner Electronics
Parsons Co.
Philbrick Researches
Phoenix Prec. Instr.
Photron Instr. Co.
Polyphase Instr. Co.
Reeves Instr. Corp.
Rheem Mfg.
Sanborn Co.
Servomechanisms, Inc.
Southwestern Ind. Elec.
Special Instrs. Lab.
Stoelting Co.
Systems Div., Beckman
Tech. Material Corp
Transistor Applications
Transistor Devices
Transval Engrg. Corp
Trio Labs., Inc
United Hydraulics
Video Instrs.

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AMPLIFIERS, Commercial Frequency

Aero Electronics
Airdesign, Inc.
Amer. Electroneering
Amer. Machine & Foundry
Amplifier Corp. of Amer.
Assembly Products
Avion Div.
Ballantine Labs., Inc.
Bell Sound Systems
Bendix Aviation Corp.
Berkshire Labs.
Blonder-Tongue Labs.
Bogue Electric Mfg.
Brit. Electronic Sales
Cal-Ohm Labs
Cal-Tronics Corp.
Cox Instruments
Dukane Corp.
Dynamics Instrumentation
Edin Co., Inc.
Electro Voice, Inc.
Electronic & Engrg. Serv.
Engineered Electronics
Engr. Res. & Devel.
Erwood, Inc.
F. R. Machine Works
Feiler Engrg. Co.
Femco, Inc.
Fluke Mfg.
Freed Transf. Co.
Furst Electronics
GE
General Mills Inc.
General Radio
Geotechnical Corp.
Hathaway Instr. Co.
Indikon Co.
Industrial Electronics
Industrial Test Equipt.
Interelectronics Corp.
Kahn & Co.
Kaiser Aircraft & Elect.
Kaye Devel. Co.
Keithley Instruments
Krohn-Hite
Langevin Mfg.
MacLeod & Hanopol
Magnetic Amplifiers Inc.
Magnetic Instr. Co.
Martin-Hubbard
McFarlin Co.
Michigan Electronics
Millen Mfg.
Minneapolis-Honeywell,
  Indust. Div.
National Co.
New London Instr. Co.
P & H Electronics
Radio Receptor Co.
RCA Div.
Radionics, Inc.
Raytheon Mfg.
Rheem Mfg.
Reeves Instr. Div.
Reiner Electronics
Remler Co.
Rockwell Engrg. Co.
Rowe Engrg. Co.
Sanborn Co.
Scott Inc., Hermon Hosmer
Servomechanisms, Inc.
Sherron Metallic Corp.
Southw. Ind. Electronics
Tektronix, Inc.
Televiso Co.
Thordarson-Meissner
Transistor Applications
Transistor Devices
Transval Engrg. Corp.
Transvision, Inc.
Trott Electronics
Vectron, Inc.
WacLine, Inc.
Waterman Products
Wheeler Insul. Wire
Wilmar Mfg.

AMPLIFIERS, DC

ACF Electronics
Acton Labs.
Ad-Yu Electronics Labs.
Aero Electronics
AiResearch Mfg.
Airpax Products
Allegany Instr. Co.
Allied Products Div.
Allied Radio
All-Tronics
Amer. Electroneering
Amer. Electronic Labs.
Amer. Mach. & Foundry
Amer. Measurement &
  Control, Inc.
Amplifier Corp. of Amer.
Antenna Research Lab.
Applied Physics Corp.
Arnoux Corp.
Astra Tech. Instr.
Atlas Engrg. Co.
Audio Instr. Co.
Avion Div.
Baird-Atomic
Bell Aircraft Corp.
Belock Instr.
Bendix, Pacific Div.
Berkeley Div.
Berkshire Labs.
Bogue Electric Mfg.
Bristol Co.
Brit. Electronic Sales
Bruno-N. Y. Indust.
Brush Instrs.
Cal-Ohm Labs.
Cal-Tronics Corp.
Calidyne Co.
Cinema Engrg. Co.
Collins Radio
Computer Co. of Amer.
Computer Engrg. Assocs.
Concord Radio
Consol. Controls Corp.
Consol. Electrodynamics
Davenport Mfg.
Daystrom Instr. Div.
Devtronics, Inc.
Diatron Co.
Dittmore & Freimuth
Donner Scientific
Dressen-Barnes
Dukane Corp.
DuMont Labs., Allen B.
Dynamics Res. Assoc.
Dynamics Instrumentation
Eastern Prec. Resistor
Edin Co.
Electro Mechanical Div.
Electro-Mechanical Res.
Electro-Medical Lab.
Electro Precision Corp.
Electrol, Inc.
Electronic Assocs.
Electronic Controls, Inc.
Electronic Engrg. Assocs.
Electronic Engineering
Electronic & Engrg. Serv.
Electronic Measmts. Co.
Electronic Prods. Co.
Electronic Res. Assocs.
Electronic Tube Corp.
Ellis Associates
El-Tronics, Inc.
Engineered Electronics
Engineering Res. & Devel.
Engrg. Enterprises
Epsco, Inc.
Erie Resistor
Erwood, Inc.
Farrand Optical
Federal Telephone & Radio
Feedback Controls
Feiler Engrg. Co.
Femco, Inc.
Fielden Instr. Div.
Ford Instr. Co.
Franklin Electronics
Furst Electronics, Inc.
GE
General Communication
General Radio
Geotechnical Corp.
Goodyear Aircraft
Gulton Industries
Hagan Chem. & Controls
Hallamore Electronics
Hall Scott
Hamner Electronics
Hathaway Instr. Co.
Heiland Div.
Hoover Electronics
Hycon Electronics
Indikon Co.
Indust. Test Equipt. Co.
Industrial Control Co.
Instrument Labs.
Jack Scient. Instr. Co., Bill
James Vibrapowr Co.
Jarco Services
Jarrell-Ash
Kahn & Co.
Kaiser Aircraft & Elect.
Kaye Devel. Co
Keithley Instruments
Keystone Products
Kin Tel
Langevin Mfg. Corp.
Lear, Inc.
Leeds & Northrup
Lewyt Metal Prods.
Librascope Inc.
Link Aviation Inc.
Liston-Folb
MacLeod & Hanopol
Magnavox Co.
Magnetic Amplifiers Inc.
Magnetic Instr. Co.
Magnetic Res. Corp.
Mag Elect. Prods.
Manning, Maxwell & Moore
Maxson Instr. Div.
McFarlin Co
Michigan Electronics
Mid-Century Instrumatic
Midwestern Instruments
Millen Mfg. Co.
Millivac Instruments
Minneapolis-Honeywell
  Boston Div.
Nalley Co.
Neff Instrument
Nelson Instr. Co.
Non-Linear Systems
Norden-Ketay
Offner Electronics
Ohmart Corp.
Oltronix Co.
Olympic Devel. Co.
Parsons Co.
Perkin-Elmer
Philbrick Researches
Phoenix Prec. Instr.
Photocon Research
Photron Instr. Co.
Photovolt Corp.
Pioneer Magnetics
Polytechnic Res. & Devel.
Power Supplies
Process & Instruments
Radiation Counter Labs.
RCA Div.
Radionics
Raytheon Mfg.
Reeves Instr. Corp
Reiner Electronics
Remler Co.
Rheem Mfg.
Richardson-Allen
Rockwell Engrg. Co.
Rowe Engrg. Co.
Sanborn Co.
Servo Corp. of Amer.
Servomechanisms, Inc.
Servo-Tek Products
Shepard Labs.
Southw. Ind. Electronics
Special Instruments Lab.
Spencer-Kennedy
Spivey, Inc., James S.
Std. Electronic Res.
Stoelting Co.
Systems Div., Beckman
Taber Inst. Corp.
Technical App. Builders
Technology Instr. Corp.
Tektronix, Inc.
Texas Instrs., Ind. Div.
Thordarson-Meissner
Topp Industries
Transistor Applications
Transistor Devices
Transval Engrg. Corp.
Trio Labs., Inc.
Trott Electronics
United Control Corp.
United Hydraulics
Universal Transistor
Vectron, Inc.
Video Instrs.
Virginia Electronics
WacLine, Inc
Wallson Associates
Western Radiation Lab.
Weston Instr
Wiancko Engrg. Co.

AMPLIFIERS, Electrometer

Amerac, Inc.
American Electronic Labs.
Amer. Tradair Corp.
Applied Physics
BJ Electronics
Beckman Div.
Berkshire Labs.
Bristol Co.
Consol. Electrodynamics
Curtiss-Wright
Daven Co
General Radio Co.
Hallikainen Instrs.
Industrial Control Co.
Industrial Electronics
Keithley Instruments
Kistler Instr. Co.
Lel, Inc.
MacLeod & Hanopol
Mid-Century Instrumatic
Minn.-Honeywell,
  Indust. Div.
Ohmart Corp.
Schaevitz Engrg.
Special Instrs. Lab
Transistor Applications
Transval Engrg. Corp.
Trott Electronics
Wac Line, Inc.

AMPLIFIERS, Logarithmic

Astra Tech. Inst. Corp.
Audio Instr. Co.
Avion Div.
Axler Associates
BJ Electronics
Baird-Atomic, Inc.
Brush Instruments
Calif. Tech. Indust.
Cleveland Inst.
Curtiss-Wright
Daven Co.
Daystrom Instr. Co
Daystrom Nuclear Div.
Deltron, Inc.
Donner Scientific
Electro-Voice, Inc.
Electronic Assocs.
Furst Electronics
Interelectronics Corp.
Keithley Instrs., Inc.
Leeds & Northup
LEL, Inc.
Magnetic Instr. Co.
Mid-Century Instrumatic
Moseley Co., F. L.
Parsons Co.
Phoenix Prec. Instr
Radio City Prods.
Radionics, Inc
Reeves Instr. Corp.
Sanborn Co
Schaevitz Engrg.
Tarc Electronics Inc
Transistor Applications
Trott Electronics
Universal Transistor
Vickers, Inc.

AMPLIFIERS, Magnetic, including Saturable Reactors

Acromag, Inc.
Adler Electronics
Aerovox Corp.
AiResearch Mfg.
Airpax Prods.
Allied Engrg. Div.
All-Tronics, Inc.
Amer. Electronics
Amer. Mach. & Foundry
Amer. Measurement &
  Control, Inc.
Arnold Magnetics Co.
Arnoux Corp.
Atlas Engrg. Co.
Avion Div.
Basler Electric
Bendix, Pacific
Berkeley Div.
Berndt-Bach
Bogue Electric
Bone Engrg. Corp.
Brit. Electronic Sales
Burroughs Electronics
Butler Mfg.
CGS Labs., Inc.
Calif. Magnetic Cont. Corp.
Calmag Div.
Carad Corp.
Chicago Std. Transf. Corp.
Clark Controller Co.
Communication Access. Co.
Consol. Controls Corp.
Control Components Co.
Control Div., Magnetics
Control Panel Corp.
Daystrom Instr. Div.
Daystrom Nuclear Div.
Detroit Contls., Mil. Prods.
Dormeyer Industries
D & R Limited
Dressen-Barnes
Dukane Corp.
Dynamics Res. Assoc.
Engineered Magnetics
Federal Telephone & Radio
Feedback Controls
Ford Instr. Co.
Freed Transf. Co.
GE, Apparatus Sales
General Ceramics
General Instrument Co.
General Magnetics
Genl. Prec. Lab.
Goslin Electric & Mfg.
Gramer-Halldorson
Gudeman Co
Gulton Industries
Hanson-Gorrill-Brian
Helipot Div.
Hevi-Duty Elect. Co.
Hycor Div.
Indikon Co.
Industrial Control Co.
Jack Scient. Instr. Co., Bill
Jeffries Transformer
Kaiser Aircraft & Elect.
Kearfott Co.
Keystone Products
Kollsman Inst.
Lear, Inc.
Librascope, Inc.
Litton Ind. of Md.
Magnavox Co.
Magnetic Amplifiers Inc.
Magnetic Controls
Magnetic Industries, Inc.
Magnetic Instr. Co.
Magnetic Res. Corp.
Magnetics, Inc.
Maxson Instr. Div.
Mercury Electronic
Minneapolis-Honeywell,
  Boston Div.
Molded Insulation
Natl. Aircraft Corp.
Norden-Ketay
NYT Electronics, Inc.
Osborne Electric Co.
Pacific Instr. Corp.
Peerless Div., Altec
Perkin Engrg. Co.
Pioneer Magnetics
Polytechnic Res. & Devel.
Potter Instr. Co.
Power Supplies
Pulse Engrg., Inc.
Ramo-Wooldridge
Raytheon Mfg. Co.
Reeves Instr. Corp.
Rheem Mfg. Co.
Sangamo Electric
Servonics, Inc.
Shepard Labs.
Sorenson & Co.
Sorgel Electric
Southw. Ind. Electronics
Specialties Inc.
Sprague Engrg. Corp.
Standard Electrical Prods.
Std. Electronic Res. Corp
Sterling Transf. Corp
Summers Gyroscope
Technical App. Builders
Telemeter Magnetics, Inc.
Thermador Electcl. Mfg.
Thompson Products
Thordarson-Meissner
Timely Insts. & Conts. Co.
Topp Industries
Torwico Electronics, Inc.
Transistor Applications
Transformers, Inc
Transval Engrg. Corp.
Triad Transf. Corp.
United Control Corp.
United Transformer Corp.
Varo Mfg. Co.
Vari-L Company, Inc.
Vickers Electric Div.
WacLine, Inc.
Walkirt Co.
Wallson Associates
Westinghouse Electric
Wheeler Insul. Wire

AMPLIFIERS, Miscellaneous, including Geophysical, Nucleonic, Strain-gage Oscillograph, etc.

ACF Electronics
A-V Mfg. Corp.
Acton Labs.
Advanced Electronics Inc.
Aero Electronics
Aerovox Corp.
Airborne Acces. Corp
Alden Elect. & Impulse
Allegany Instr. Co.
Allied Engrg. Div.
Allied Products Div.
All-Tronics, Inc.
Amerac, Inc.
Amer. Electroneering
Amer. Electronic Labs
Amer. Meas. & Control
American-Monarch
Amer. Tradair Corp.
Amplifier Corp. of Amer
Anton Electronics Labs.
Applied Science Corp
Arenberg Ultrasonic Lab.
Arnoux Corp
Atlantic Research Corp
Automation Corp. of Amer.
BJ Electronics
Baird-Atomic
Baldwin-Lima Hamilton
Ballantine Labs.
Basic Controls, Inc.
Beckman Div.
Berkeley Div.
Berkshire Labs.
Bristol Co.
Brit. Electronic Sales
Browne & Sharpe
Brush Instrs.
Calidyne Co.
Calmag Div.
Cal-Ohm Labs.
Centralab Div.
Century Electronics
Chesapeake Instr. Corp.
Chicago Aerial Ind.
Cleveland Instrument
Computer Engr. Associates
Consol. Electrodynamics
Control Components Co.
Control Electronics
Cook Electric
Cooper Dev. Corp.
Corson Electric Mfg.
Crescent Engrg. & Res. Co.
Curtiss-Wright
D & R Ltd.
Daven Co.
Davies Labs. Div.
Daystrom Nuclear Div.
Daystronic Corp.
Detectolab, Inc.
De-Tec-Tronic Corp
Diatron Co.
Dukane Corp.
DuMont Labs., Allen B.
Dynamics Res. Assoc.
Dynamics Instrumentation
EPR Special Prods.
Eastern Prec. Resistors
Edin Co.
Elcor, Inc.
El Dorado Electronics
Electro-Mechanical Dev.
Electro-Mecanical Res.
Electro-Pulse, Inc.
Electro-Voice
Electronic Associates
Electronic Engrg. Co
Electronic & Engrg. Serv.
Electronic Measurements
Electronic Res. Assocs.
Electronic Tube Corp.
Electronics Devel. Lab.
Ellis Associates
Endevco Corp.
Engineered Electronics
Epsco, Inc.
Farnsworth Electronics
Fairbanks, Morse & Co.
Feedback Controls
Fisher Research Lab.
Forro Scientific
Franklin Electronics
Furst Electronics
GE, Apparatus Sales
General Radio Co
Gates Radio Co.
Geotechnical Corp.
Gilmore Industries
Gulton Industries
Gyroscopes, Inc.
Hall-Scott, Inc.
Hamner Electronics
Harvey-Wells Electronics
Hathaway Instr. Co
Heiland Div.
Hewlett-Packard
I-L-S Instr. Corp.
Indikon Co
Industrial Control
Industrial Electronics
Indust. Test Equipt. Co.
Insco Company
Instrument Labs
Instrumentation Assoc.
Insts. for Industries, Inc.
Interelectronics Corp.
Internat. Research & Dev.
Kahn & Co.
Keithley Instrs., Inc.
Kin Tel
Krohn-Hite
LEL, Inc
Land-Air, Inc
Lear, Inc
Leeds & Northup
Ling Electronics
Mag Elect. Prods.
Magnavox Co.
Magnecord, Inc.
Magnetic Amplifiers
Magnetic Instr. Co
Magnetic Research Corp
Magnetico, Inc
Maxson Instr. Div.
Menlo Park Engrg
Micro Gee Prods., Inc
Midwestern Instruments
Millen Mfg. Co.
Minneapolis-Honeywell,
  Boston Div.
Model Engrg. & Mfg.
Nankervis Co., George L.
Natl. Aircraft Corp.
Natl. Radiac, Inc.
Nems-Clarke
Non-Linear Systems
Norwood Controls
Nuclear Corp. of Amer.
Nuclear Electronics
Nucleonic Corp. of Amer.
Offner Electronics
Oltronix Co.
Orbitran Co.
Owen Labs., Inc
P & H Electronics
Parsons Co., Ralph M
Peschel Electronics, Inc.
Philbrick Researches
Phoenix Prec. Instr.
Photron Instr. Co.
Polarad Electronics
Polyphase Instr. Co.
Polytechnic Res. & Devel.
Process & Instruments
R S Electronics
Radiation Inc.
Radiation Instr. Dev. Lab.
Radionics, Inc
Remler Co.
Rheem Mfg. Co., Elect.
Sanborn Co.
Schaevitz Engrg
Seismograph Service Corp.
Slaughter Co.
Southw. Indust. Electronics
Spencer-Kennedy
Spivey, Inc., James S.
Std. Electronic Res.
Statham Instrs.
Stromberg-Carlson
Systems Div., Beckman
Swedish Gage
Taber Inst. Corp.
Technical Associates
Tektronix, Inc.
Texas Div., Clevite
Texas Insts., Inc.
Texas Instrs., Ind. Div.
Thermador Electl. Mfg.
Thermo-Electric Co., Inc.
Thordarson-Meissner
Thwing-Albert
Timely Insts. & Consts. Co.
Transistor Applications
Transistor Devices
Transval Engrg. Corp.
Trott Electronics
Ultradyne Engrg. Labs.
United Controls
United Hydraulics
Universal Transistor
Victoreen Instr. Co.
Video Instrs.
Virginia Electronics
Voltron Products
Wakefield Industries
Western Radiation Lab.
Western Design & Mfg. Co
Wheeler Electronic Corp
White Instr. Labs.
Zacharias Electronics

AMPLIFIERS, Radio Frequency, including IF

ACF Electronics
Adler Electronics
Airborne Instruments Lab
Allied Engrg. Div.
Amerac, Inc
Amer. Electroneering
Amer. Electronic Labs.
Amer. Mach. & Foundry
Audio Devel. Co.
BJ Electronics
Bell Aircraft Corp.
Bendix-Pacific
Berkeley Div.
Blonder-Tongue Labs
Boonton Radio
Browning Labs.
Bruno-N. Y. Indust.
Brush Instruments
Bunnell & Co.
Cal-Tronics Corp.
Canoga Corp.
Centralab Div.
C.G.S. Labs.
Clarke Instr. Corp
Clegg Labs, Inc.
Collins Radio
Computer Co. of Amer
D & R Limited
Devtronics Inc.
Diatron Co.
Dittmore & Freimuth
Dukane Corp.
DuMont Labs., Allen B.
Electrical & Phys. Instr.
Electro Mechanical Div.
Electro Mech. Research, Inc
Electronic Communication
Electro Voice, Inc.
Electronic & Engrg. Serv.
Electronic Tube Corp.
El-Tronics Inc.
Engineering Res. & Devel
Erdco Engrg.
Farnsworth Electronics
Feiler Engrg. Co.
Femco, Inc.
Ferris Instr. Corp.
F. R. Machine Works
GE, Apparatus Sales
Gates Radio Co.
General Communication
General Magnetics
General Radio
Georator Corp.
Geotechnical Corp
Goodyear Aircraft
Heiland Div.
Hewlett-Packard
Hycon Mfg. Co.
Hydro-Aire Inc.
Inst. Corp. of Fla.
Insts. for Industries, Inc
International Telemeter
Jerrold Electronics
Johnson Co., E. F.
K-F Devel. Co.
Kaiser Aircraft & Elect.
Kahn & Co.
Kay Electric
Kearfott Co.
LEL, Inc
Lear, Inc.
Ling Electronics
Magnavox Co.
Magnetic Instr. Co
Mag Elect. Prods.
McFarlin Co.
Maxson Instr. Div.
McKenna Labs.
Measurements Corp.
Menlo Park Engrg.
Millen Mfg. Co.
Millivac Instruments
Mohawk Electronic
Munston Mfg. & Service
National Co.
Natl. Aircraft Corp.
Nems-Clarke
New London Instr. Co.
Norden-Ketay
P & H Electronics
Panoramic Radio Prods.
Photocircuits Corp.
Polarad Electronics
Polyphase Instr.
Polytechnic Res. & Dev.
R S Electronics Corp.
Radiation, Inc.
Radio City Products
Radio Receptor Co.
Radionics, Inc.
Ramo-Wooldridge
Raytheon Mfg.
RCA Div.
Reeves Instr. Div.
Reiner Electronics
Remler Company
Rheem Mfg. Co.
Rowe Engrg. Co.
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Sherron Metallic Corp.
Sierra Electronic Corp.

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Stromberg-Carlson
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Tech. Material Corp.
Technology Instr. Corp.
Tektronix, Inc.
Tele-Dynamics Inc.
Telechrome, Inc.
Tel-Instr. Elects. Corp.
Thordarson-Meissner
Transistor Applications
Transval Engrg. Corp.
Transvision, Inc.
Triumph Mfg.
U. S. Electronics
Varian Assocs.
Vectron, Inc.
Virginia Electronics
Walkirt Co.
Waterman Products
Weinschel Engrg. Co.
West Coast Electronics
Wickes Engrg. & Const.
Wilmar Mfg

AMPLIFIERS, Servo

A-V Mfg. Corp.
Acromag, Inc.
Adler Electronics
Aero Elx. (Chicago)
Airborne Accessories Corp.
Airpax Products
All-Tronics, Inc.
Amer. Electronic Labs.
Amer. Mach. & Foundry
Amer. Measurements & Control.Inc.
Analogue Controls
Arma Div.
Askania Reg. Co.
Astra Tech. Instr.
Atchley, Inc., Raymond
Automation Corp. of Amer.
Autonetics Div.
Autron Engrg., Inc.
Avion Div.
Bell Aircraft Corp.
Belock Instr.
Bendix Aviation Corp.
Bendix, Eclipse-Pioneer
Berkeley Div.
Bogue Electric Mfg.
Bristol Co.
Brit. Electronic Sales
Brush Instrs.
Burton Mfg. Co.
Calidyne Co.
Calif. Magnetic Cont. Corp.
Calmag Div.
Canoga Corp.
Cedar Engrg., Inc.
Communication Access. Co.
Consolidated Avionics
Consolidated Controls Corp.
Control Components Co.
Control Data Corp.
Control Electronics
Control Specialists, Inc.
Cook Electric
Datran Electronics
Daven Co.
Daystrom Instr. Div.
Detroit Contls., Mil. Prods
Donner Scientific
Dukane Corp.
Dynamic Research Co.
Dynamics Res. Assoc.
EPR Special Prods.
Electro-Mech. Div.
Electro Precision
Electronic Assoc.
Electron Spec. Co.
Engineered Magnetics
Engrg. Enterprises
Engrg. & Res. Corp.
Erdco Engrg.
Exactel Instr.
Farnsworth Electronics
Farrand Optical
Feedback Controls
Franklin Electronics
Freed Transf. Co.
GE, Apparatus Sales
General Magnetics
Goodyear Aircraft
Gulton Industries
Gyroscopes, Inc.
Hagan Chem. & Controls
Hall-Scott, Inc.
Harvey-Wells Electronics
Helipot Div.
Heller Co., Gerald
Henschel Corp.
Hycon Electronics
I-L-S Instr. Corp.
Indikon Co.
Industrial Control Co.
Industrial Electronics
Indust. Test Equip.
Inst. Corp. of Fla.
Jack Scient. Instr. Co., Bill
Kaiser Aircraft & Elect.
Kearfott Co.
Keystone Products
Kollsman Inst.
Lear, Inc.
Leeds & Northup
Librascope, Inc.
Ling Electronics
Link Aviation
Litton Ind. of Md.
Magnavox Co.
Magnetic Amplifiers Inc.
Magnetic Controls
Magnetic Industries, Inc.
Magnetic Instr. Co.
Magnetic Res. Corp.
Manning, Maxwell & Moore
Maxson Instr. Div.
Metrolog Corp.
Micro Gee Prods., Inc.
Mid-Century Instrumatic
Midwestern Instruments
Minneapolis-Honeywell Indust. Div.
Minneapolis-Honeywell, Aeronautical Div. Boston Div.
Model Engrg. & Mfg.
Muirhead Instrument
NJE Corp.
Nader Mfg.
Narda Corp.
National Co.
Natl. Aircraft Corp.
Nelson Intsr. Co.
Norden-Ketay
North Atlantic Industs.
Norwood Controls
Oster Mfg.
Pax Electronics
Pegasus Labs.
Peschel Electronics, Inc.
Philbrick Researches
Phoenix Prec. Instr.
Pioneer Magnetics
Power Supplies
Radiation Inc.
Radionics, Inc.
Ramo-Wooldridge
Reeves Instr. Corp.
Rheem Mfg. Co.
Rockwell Engrg. Co.
Sanborn Co.
Sanders Associates
Schaevitz Engineering
Scott, Inc., Hermon H.
Servo-Tek Prods.
Servomechanisms, Inc.
Servonics, Inc.
Servo Corp. of Amer.
Shepard Labs.
Simmons Aerocessories
Southwestern Ind. Elec.
Std. Electronic Res.
Stavid Engrg. Inc.
Sterling Prec., Inst. Div.
Stoelting Co.
Stromberg-Carlson
Suffolk Products
Tarc Electronics
Texas Insts., Inc.
Thermo-Electric Co., Inc.
Thompson Products
Timely Insts. & Consts. Co
Torwico Elects., Inc.
Transicoil Corp
Transistor Applications
Transval Engrg. Corp.
Trio Labs., Inc.
United Control Corp.
United Hydraulics
Universal Match
Universal Transistor
Vectrol Engrg., Inc.
Vickers Electric Div.
Voltron Products
WacLine, Inc.
Waldorf Instr. Co.
Walkirt Co.
Wallson Associates
Warren Mfg. Co.
Western Design & Mfg. Corp.
Western Gear Corp.

AMPLIFIERS, Vibration, see Vibration Instruments

AMPLIFIERS, Wideband

ACF Electronics
A.R.F. Products
Acton Labs.
Adler Electronics
Ad-Yu Electronics Labs.
Airborne Instruments Lab.
Alfred Electronics
Allied Engrg. Div.
Amer. Electronic Labs.
Amer. Mach. & Foundry
Arenberg Ultrasonic Lab.
Atlantic Research Corp.
Avion Div.
BJ Electronics
Bendix Aviation Corp.
Berkeley Div.
Beva Laboratory
C.G.S. Labs.
Caltronics Corp.
Canoga Corp.
Computer Engrg. Assoc.
Deltron, Inc.
Diatron Co.
Donner Scientific
Dukane Corp.
DuMont Labs., Allen B.
Electro-Mech. Research
Electro Products Labs.
Electronic & Engrg. Serv.
Electronic Instr. Co.
Electronic Res. Assoc.
Electro-Pulse Inc.
Electro Voice Inc.
Electrol, Inc.
El-Tronics Inc.
Endevco Corp.
Engrg. Research & Devel.
Epsco Inc.
F. R. Machine Works
Federal Telephone & Radio
Feller Engrg. Co.
Furst Electronics
General Communication
General Radio
Hamner Electronics
Harrison Labs.
Hathaway Instr. Co.
Hewlett-Packard
Indust. Test Equipt. Co.
Inst. Corp. of Fla.
Insts. for Industries, Inc.
Interelectronics Corp.
Internat. Telemeter Corp.
Jerrold Electronics
Kahn & Co.
Kay Electric
Kearfott (Western)
Keithley Instrs.
Kin Tel
LEL, Inc.
MB Mfg. Co.
Mag. Elect. Products
Magnetic Instr. Co.
Marconi Instruments
Maxson Instr. Div.
Menlo Park Engrg.
Mid-Century Instrumatic
Millivac Instr. Co.
Nalley Co.
National Co.
National Radiac, Inc.
Neutronics Research
New London Instr. Co.
North Hills Electric
P & H Electronics
Photron Instr. Co.
Polarad Electronics
R. S. Electronics
Radiation Counter Labs
Radiation Instr. Co.
Radiation Instr. Dev. Lab.
Reeves Instr. Corp.
Rese Engrg. Co.
Rutherford Electronics
Sanborn Co
Scott Inc., Hermon Hosmer
Servo Corp. of Amer.
Sierra Electronic Corp.
Spencer-Kennedy
Std. Electronic Res.
Technology Instr. Div.
Tektronix, Inc.
Tel-Instr. Electronics
Tele-Dynamics, Inc.
Telechrome, Inc.
Telonic Industries
Thordarson-Meissner
Transistor Applications
Transvision, Inc.
U. S. Electronics
Varian Assocs.
Volkers & Schaeffer

ANALYTICAL INSTRUMENTS (see also Chromatography, also Defractometers, also Electroanalysis, also Electrophoresis, also Interferometers, also Oxidation-Reduction, also Spectrometers, also Titrometers, etc.)

Advanced Instrs., Inc.
Aero Electronics
Allied Engrg. Div.
Amer. Balance
Amer. Electronics
Amer. Instr. Co.
Amer. Tradair Corp.
Analytic Systems Co.
Apex Scient.
Applied Physics Corp.
Applied Research Labs.
Applied Science Corp.
Avion Div.
Axler Associates
BJ Electronics
B & K Mfg.
Bacharach Industrial Instr.
Baird-Atomic
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Bendix-Friez
Beva Laboratory
Boonton Radio
Bristol Co.
Bush Assocs.
Bushnell Co
Cahn Inst. Co
Cambridge Instr. Co.
Carroll Co.
Central Scientific
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Coleman Electric
Coleman Instr.
Consol. Electrodynamics
Davenport Mfg.
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Dietert Co.
Dorber Co.
Edin Electronics
Eitzen Co., Louis
Engis Equip. Co.
Epsco, Inc.
Ercona Corp.
Esterline-Angus
Farnsworth Electronics
Fielden Instr. Div
Fisher Research Lab.
Fisher Scientific
Foxboro Co.
GE, Apparatus Sales
GE, X-Ray Corp.
General Electronic
Glass Engrg. Labs.
Goodyear Aircraft
Gow-Mac Instr. Co.
GPS Instr. Co., Inc.
Greiner Co., Emil
Hallikainen Instruments
Harshaw Scientific Div.
Harvey-Wells Electronics
Hays Corp.
Heusser Instr. Mfg.
Hogan Labs.
Hycon Mfg.
Industrial Control Co.
Industrial Insts. Inc.
Insco Co.
Instrument Devel. Labs.
Instrument Engrg. Serv.
International Instr. Co.
Internat. Res. & Dev.
Jarco Services
Jarrell-Ash
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Kent Cliff Labs.
Laboratory Equipt. Corp.
Leeds & Northrup
Lucian Labs.
Macbeth Corp.
Manostat Corp.
Menlo Research Lab.
Milton Roy Co.
Mine Safety Appliances
Minneapolis-Honeywell, Rubicon Instrs.
Nankervis Co.
Natl. Spectrographic Sales
North Amer. Philips
North Atlantic Industs.
Nuclear Research
Ohmart Corp.
Patwin Instruments Div.
Perkin-Elmer
Phoenix Prec. Instr.
Precise Measmts. Co.
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Quality Electric Co.
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Radio Frequency Labs.
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Schlumberger Well
Scientific Glass App.
Sensitive Res. Instr.
Servo Corp. of Amer.
Standard Electronics
Stelma, Inc.
Taller & Cooper
Technical Associates
Testing Machines, Inc.
Thermco Labs.
Torsion Balance Co.
U. S. Testing Co.
Varian Associates
Voltron Products
WacLine, Inc.
Weston Instr.

ANALYZERS, Chemical Composition, see Analytical Instruments

ANALYZERS, Circuit Breaker, see Circuit Breaker Analyzers

ANALYZERS, Electric Wave, see Spectrum Analyzers

ANALYZERS, Electronic Circuit, see Circuit Testers

ANALYZERS, Flight, see Navigation Aids

ANALYZERS, Gas, see Gas Analyzers

ANALYZERS, Ignition System, see Engine Test Instruments

ANALYZERS, Industrial Circuit, see Circuit Analyzers, Industrial

ANALYZERS, Industrial Power, see Electric Power

ANALYZERS, Infrared, see Analytical Instruments, also Spectrometers

ANALYZERS, Nitric Oxide, see Gas Analyzers

ANALYZERS, Oxygen, see Gas Analyzers

ANALYZERS, Radio Set, see Circuit Testers

ANALYZERS, Sound, see Sound

ANALYZERS, Spectrum see Spectrum Analyzers

ANEMOMETERS, Hot-wire

Aero Research Instr. Co.
Airflo Instr. Co.
Astra Tech. Instr.
Atlantic Research Corp.
Bendix-Friez
Bristol Engrg. Corp.
Flow Corp.
Hastings-Raydist
Hill & Co.
Gilmore Industries
Illinois Testing Labs.
Instruments Corp.
Joy Co., Clark H.
StAM Instr. Corp.
Serdex, Inc.
Victory Engrg. Corp.
Willson Products

ANEMOMETERS, Mechanical

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Bacharach Industrial Instr.
Beckman & Whitley
Bendix, Eclipse-Pioneer
Bendix-Friez
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Dwyer Mfg., F. W.
Flight Research Engrg.
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Georator Corp.
Gray Instr. Co.
Green, Henry J.
Gurley, W. & L. E.
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Hill & Co.
Illinois Testing Labs.
Instruments Corp.
Kahl Scientific Instr.
Keuffel & Esser
Mico Instr. Co.
Mine Safety Appliances
North Amer. Instr.
Revere Corp.
Spence Engrg. Co.
Std. Science Supply
Stewart, M. C.
Taylor Instr. Cos.
Thermometer Corp.
Wallace & Tiernan
Waugh Engrg. Co.
Westburg Mfg.
Willson Products

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Mico Instr. Co.
Sorenson & Co.

ANNUNCIATORS, see Monitors

ANTENNAS

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Ainslie Corp.
Airborne Instruments Lab.
Aircraft Radio Corp.
Airtron, Inc.
Amerac, Inc.
Amer. Electroneering
Amer. Electronics Labs.
Amer. Elite, Inc.
Amer. Mach. & Foundry
Amphenol Electronics
Avion Div.
Bellmore Gear Corp.
Bogart Mfg. Co.
Budd-Stanley Co.
C. G. S. Labs.
Canoga Corp.
Coaxial Connector Co.
Collins Radio
Commercial Products Div.
Cornell-Dubilier
Craig Systems
Dale Products
Dalmo Victor Co.
Defiance Engrg. & Mcrwve.
DeMornay-Bonardi
Diamond Antenna & Microwave
Dittmore & Freimuth
Dielectric Prod. Engrg.
Electron-Radar Prods.
Electron Spec. Co.
Electrosonic Engrg Co.
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Energy Kontrols
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Erco Div.
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Farnsworth Electronics
Fecker, Inc.
Fretco, Inc.
Gabriel Co.
Gates Radio Co.
General Bronze Corp.
General Communication
Goodyear Aircraft
Hall Scott
Hewlett-Packard
Hycon Mfg.
I. T. E. Circuit Breaker
JFD Mfg.
Johnson Co., E. F.
Kay Electric
Kearfott (Western)
Kennedy & Co., D. S.
Lear, Inc.
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Microwave Assocs.
Munston Mfg. & Service
Narda Corp.
National Co.
Natl. Aircraft Corp.
Nems-Clarke
Norden-Ketay Corp.
Nuclear Corp. of Amer.
Polarad Electronics
Polytechnic Res. & Devel.
Prodelin, Inc.
Radiation, Inc.
Raytheon Mfg.
Sanders Associates
Sperry Gyroscope
Sperry Products
Stavid Engrg., Inc.
Sterling Prec. Instr. Corp.
Suffolk Products
Sylvania Electric Prods.
Technical Appliance Corp.
Technicraft Labs., Inc.
Tele-Dynamics, Inc.
Transval Engrg. Co.
Virginia Electronics
WacLine, Inc.
Western Gear Corp.

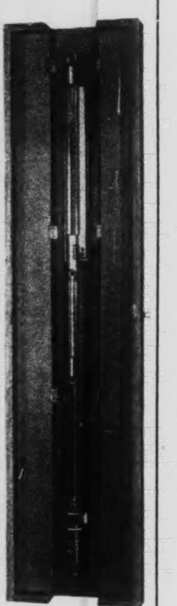
APPARATUS, Laboratory, see Laboratory Apparatus and Supplies

APPARATUS, Laboratory, Fused Quartz, see Laboratory Apparatus

APPARATUS, Laboratory, Glass, see Laboratory Apparatus

APPARATUS, Vacuum, see Vacuum Apparatus

AREA METERS, see Flowmeters, Area



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ALTIMETER TESTING

OLD-ENGLISH-STYLE
(house-type)

ANEROID
(Weather and Altitude)

BAROGRAPHS

Henry J. Green Instruments, Inc.
2500 Shames Drive, Westbury, L. I., N. Y.

For more information circle **398** on inquiry card.

ARTIFICIAL HORIZONS, see Aircraft Instruments

ASPHALT TESTING APPARATUS, including Penetration Needles

Alpha Instr. Co.
Amer. Instr. Co.
Ann Arbor Instr. Works
Apex Scient.
Atlas Electric Devices
Blue M Electric
Bowen & Co.
Brabender Instrs.
Central Scientific
Chatillon & Sons
Curtiss-Wright
Custom Scientific Instr.
Dillon & Co.
Eitzen Co., Louis C.
Exact Weight Scale
Fish-Schurman
Fisher Scientific
Greiner, Emil
Hallikainen Instrs.
Humboldt Mfg.
Koehler Instr. Co.
Kruger Instruments
Labline, Inc.
Olsen Testing Mach.
Permo, Inc.
Phila. Thermometer Co.
Precision Scientific
Riehle Test. Mach. Div.
Scott Testers, Inc.
Soiltest, Inc.
Technical Equipt. Co.
Tell-Tronics Prod.
Temperature Engrg.
Testing Machines, Inc.
Thwing-Albert
Trerice Co., H. O.
Van Keuren Co.
Victory Engrg. Corp.

ASSEMBLIES, Instrument

A & M Tool & Die
Abrams Instr. Corp.
Accurate Spring Mfg.
Aerolite Electronics
Aeromarine Instr. Co.
Aerovox Corp.
AiResearch Mfg. Co.
Alina Corp.
Allied Prods. Div.
Amer. Electronics
Amer. Instr. Co.
Amer. Kloeckner-Moeller
Amer. Metrix Corp.
Ampco Mfg. Co.
Anderson Co.
Assembly Products
Atlas Prec. Products
Barbour Stockwell
Bausch & Lomb
Bayside Watch Tool Co.
Bellmore Gear Corp.
Bendix, Eclipse-Pioneer
Bendix, Pioneer-Central
Boonton Radio
Bristol Co.
Buhl Optical
Burlington Instr.
Century Geophysical
Chicago Indust. Instr.
Colvin Labs.
Control Data Corp.
Daven Co.
Daco Instrument
Davenport Mfg.
Daystrom Instr. Div.
Dayton Instruments
Dittmore & Freimuth
Dome Precision Corp.
Dynametrics Corp.
ESCO Prods. Co.
Eastern Prec. Resistors
Eastern Specialty Co.
Eby, Inc., Hugh H.
Edna Lite Co.
Edin Co.
Eitzen Co., Louis C.
Electric Design & Mfg.
Electric Tachometer Corp.
Electro-Chemical Engrg.
Electro-Mech. Div.
Electro Precision Corp.
Electronics, Inc.
Empire State Labs.
Engis Equipt. Co.
Engrg. & Res. Corp.
Erie Resistor
Esterline-Angus
Etched Prods. Corp.
Farnsworth Electronics
Farrand Optical
Fecker, Inc.
Ferner Co.
Fisher & Porter Co.
Ford Instr. Co.
Fulton-Sylphon Div.
Gadgets, Inc.
Gaertner Scientific
GE
General Industries Co.
Genisco Inc.
Geophysical Instr. Div.
Gervos Instruments
Giannini & Co.
Grammes Sons
Gustaveson, Inc.
Hairspring Vibrating Co.
Hall-Barkan Insts.
Hamilton Tool Co.
Hamilton Watch
Haydon Mfg.
Howard Clock
Ideal-Aerosmith
Illinois Testing Labs.
Insco Company
Instru-Lec Corp.
Instrument Corp.
Instrument Develop. Labs.
Instr. Devel. & Mfg. Corp.
Instrument Gear Works
Instrument Products
Instruments Inc.
Intercontinental Dynamics
Internat. Res. & Dev.
J-B-T Instruments
Jensen Tool Co., H. C.
Jordan Electronics
Kahn & Co.
Kollsman Instr. Corp.
Lake Erie Electric
Lewyt Corp.
Librascope, Inc.
Magnavox Co.
Meyer-Opticraft
Minneapolis-Honeywell, Boston Div.
Molded Insulation Co.
Moss & Co.
Nelson Electric Mfg.
New Haven Clock
Norden-Ketay Corp.
Parameters, Inc.
Peschel Electronics
Phaostron Co.
Phoenix Prec. Instr.
Plumb Co.
Potter Instr. Co.
QOS Corp.
Ram Meter, Inc.
Reeves Instr. Corp.
Schneider-Cogswell
Scovill Mfg.
Seth Thomas Clocks
Shallcross Mfg.
Shand & Jurs
Smith Mach. Co., H. A.
Specialties, Inc.
Std. Automation Prods.
Standard Electric Time
Staver Co., Inc.
Sterling Prec., Inst. Div
Stoelting Co.
Suffolk Prods. Co.
Swiss Amer. Jewel-Bear.
Swissomatic Products
Tarc Electronics Inc.
Technical Soldering Co.
Teletronics Lab., Inc.
Tel' Tronics Prods.
Thompson Clock
Thwing-Albert
Tinsley Laboratories
Tri-Dex Electronics
United States Instr. Corp.
Universal X-Ray Prods.
Vectron, Inc.
Virginia Electronics
WacLine, Inc.
Wadsworth Watch Case
Wallson Associates
Waterman Products
Wilder, Inc.
Winslow Co., Inc.
Zenith Electric
Zenith Optical Co.

ASSEMBLY MACHINES. Automatic, see Machines, Automatic Circuit Assembly

ASTRONOMICAL INSTRUMENTS

Askania-Werke A. G.
Avion Div.
Bausch & Lomb
Bendix, Eclipse-Pioneer
Berger & Sons
Bristol Co.
Bronoptics Co.
Bushnell Optical
Clark & Sons
Davidson Mfg. Co.
E & W Optical
Edmund Scientific
Ercona Corp.
Esco Prods. Co.
Farrand Optical
Fecker, Inc.
Fish-Schurman
Gaertner Scientific
Gordon Enterprises
Griswold Mfg.
Gurley, W. & L. E.
Hall-Barkan
Henson Co.
Kollsman Instr. Corp.
Lab. Optical
Lenox Instr. Co.
Librascope, Inc.
Oppiem Co., Inc.
Palos Optical
Pan-Technics, Ltd.
Perkin-Elmer
Taylor Instr. Cos.
Tinsley Labs.
Tork Clock Co.
Unertl Optical
Warren-Knight
White Co., Inc., David
Wild Heerbrugg
Zeiss, Inc., Carl

ATTENUATORS

Acton Labs.
Admittance-Namco
Aerovox Corp.
Airborne Instruments Lab.
Allen-Bradley Co.
Amerac, Inc.
Arenberg Ultrasonic Lab.
Audio Instr. Co.
Automatic Elect. Chicago
Bellmore Gear Corp.
Boonton Radio
British Electronic Sales
Bruno-N. Y. Indust.
Budd-Stanley Co.
Centralab Div.
Cinema Engrg. Co.
Clarke Instr. Co.
Clarostat Mfg.
Coaxial Connector Co.
Computer Co. of Amer.
Corning Glass Works
Custom Components
Daven Co.
Defiance Engrg. & Mcrwve
DeMornay-Bonardi
Diamond Antenna & Microwave
Dittmore & Freimuth
Dymec, Inc.
Dmeter Mfg.
Electcl. & Phys. Instr.
Electro Impulse Labs.
Electro Products Lab.
Electro-Pulse, Inc.
Electron-Radar Prods.
Electronic Assocs.
Electronic & Engrg. Serv
Emerson & Cuming
Empire Devices
Empire State Labs.
Energy Kontrols
F. R. Machine Works
Farnsworth Electronics
Federal Telephone & Radio
Feller Engrg. Co.
Filtron Co., Inc.
Gadgets, Inc.
General Communication
General Radio
Geotechnical Corp.
Hansen Electronics
Hewlett-Packard
Hickok Electcl. Instr.
Hycon Mfg. Co.
Hycor Div.
International Resistance
Internat. Telemeter Corp.
Kay Electric
Kearfott (Western)
Kearfott Co.
Kin Tel
Leeds & Northrup
Mallory & Co., P. R.
Magnetic Instr. Co.
Marconi Instruments
Measurements Corp.
Metavac, Inc.
Micromat Co.
Microphase Corp.
Microwave Devel.
Mid-Century Instrumatic
Muirhead Instrument
Narda Corp.
Newark Electric Co.
Norden-Ketay
Ohmite Mfg.
Photo-Crystals, Inc.
Polaroid Corp.
Polytechnic Res. & Devel.
Radiation, Inc.
RHO Engrg. Co.
RCA Div.
Reiner Electronics
Rutherford Electronics
Sanders Assocs.
Scott Inc., Hermon Hosmer
Servo Corp. of Amer.
Servomechanisms, Inc.
Shallcross Mfg.
Sherron Metallic Corp.
Sound Apparatus Co.
Sperry Gyroscope
Stoddart Aircraft Radio
Tech Labs., Inc.
Technicraft Labs.
Teletronics Labs., Inc.
Telonic Industries
Thordarson-Meissner
Trad Electronics Corp.
Trimount Instr. Co.
Vectron, Inc.
Virginia Electronics
WacLine, Inc.
Weinschel Engrg. Co
Westronics, Inc.

AUDIO-FREQUENCY EQUIPMENT (see also Amplifiers)

Aero Electronics Co.
Aerovox Corp.
Airdesign, Inc.
Air-O Tronics
Alcor Electronics Corp.
Allied Radio Corp.
Altec Lansing Corp.
Alto Scientific
Amer. Electronic Labs.
Ampex Corp.
Amplifier Co.
Assembly Products
Audio Devel. Instr. Co
Audio Instrument
Authorized Mfrs. Serv.
Ballantine Labs.
Beam Instr. Co.
Bell Sound Systems
Bendix, Eclipse-Pioneer
Berkeley Scientific
Berndt-Bach
Boonton Radio
Browning Labs.
Bruno-N. Y. Indust.
Brush Instruments
Cal-Ohm Labs.
Cinema Engrg. Co
Clark Radio Equipt.
Clarke Instr. Corp.
Clough-Brengle
Collins Radio
Commercial Research Div.
Computer Co. of Amer.
Computer Engrg. Assoc.
Consolidated Avionics
Daven Co.
Davenport Mfg.
Deltron, Inc.
Dittmore & Freimuth
Donner Scientific
Dukane Corp.
DuMont Labs., Allen B.
Dyna-Empire
Dynapar Corp.
Edin Electronics
Electro-Mech. Research
Electro-Medical Lab.
Electro Voice, Inc.
Electronic & Engrg. Serv.
Electro Products Lab.
Electronic Devel. Lab.
Electronic Instr. Co., Inc.
El-Tronics, Inc.
Empire Devices
Engineering Res. & Devel.
Erdco Engrg.
Erwood, Inc.
Fairchild Camera
Farnsworth Electronics
Federal Telephone & Radio
Feller Engrg. Co.
Femco, Inc.
Ferranti Electric
Fisher Radio
Fisher Res. Lab.
Freed Transf. Co
Furst Electronics
GE
Gates Radio Co
General Mills
General Radio
General Ultrasonics
Georator Corp.
Globe Phone Mfg.
Hammarlund Mfg.
Hathaway Instr., Co
Heiland Div.
Hewlett-Packard
Hickok Electcl. Instr. Co
Hycor Div.
Indust. Test Equipt. Co.
Interelectronics Corp.
Jackson Elect. Instr.
Johnson Co., E. F.
Kahn & Co.
Kaiser Aircraft & Elect.
Kay Electric
Kin Tel
Lab. of Electronic Engrg.
Lab-Tronics
Langevin Mfg. Corp.
Lear, Inc.
Lewyt Metal Prods.
Ling Electronics
Magnavox Co.
Magnecord, Inc.
Magnetic Instr. Co.
Marconi Instruments
Martin-Hubbard
Massa Labs.
McFarlin Co.
Measurements Corp.
Metron Instr. Co.
Millen Mfg.
Muirhead Instrument
Munston Mfg. & Service
Natl. Aircraft Corp.
National Co. Inc.
New London Instr. Co.
Norden-Ketay Corp.
Pacific Instr. Co.
Pacific Transducer Corp.
Philamon Labs.
Photo Crytsals, Inc.
Polarad Electronics
Premier Crystal Labs
RCA Div.
Radio City Products
Radio Receptor Co.
Radionics, Inc.
Rauland-Borg
Raytheon Mfg.
Reiner Electronics
Remler Co.
Riverbank Labs.
Scott, Inc., **Hermon Hosmer**
Sensitive Res. Instr.
Servo Corp. of Amer.
Shallcross Mfg.
Sherron Metallic Corp.
Sound Apparatus
Southw. Ind. Electronics
Std. Transf. Corp.
Stromberg Carlson
Sunshine Scientific
Sylvania Elect. Prods.
Tech. Material Corp.
Technology Instr. Div
Teletronics Lab., Inc.
Televiso Corp.
Thordarson-Meissner
Transistor Devices
Transval Engrg. Corp.
Triumph Mfg.
United Transf. Corp.
Vectron, Inc.
Virginia Electronics
Wallson Associates
Western Electro-Acoustic Lab., Inc.
Westinghouse Electric
Westport Electric
Wiancko Engrg. Co.

AUDIO-FREQUENCY OSCILLATORS, see Oscillators, Audio-Frequency

AUDIOMETERS

Aerovox Corp.
Davenport Mfg.
Erwood, Inc.
Instrumentation Assoc.
Interelectronics Corp.
Lab. of Electronic Engrg.
Magnetic Instr. Co.
Marconi Instruments
Mine Safety Appliances
Scott, Inc., Hermon Hosmer
Shallcross Mfg.
Stoelting Co.

AUTOCLAVES, High-Pressure

Aetna Scientific
Amer. Instr. Co.
Artisian Metal Prods.
Autoclave Engrs.
Barnstead Still
Central Scientific
Emerson App. Co.
High Pressure Equipt. Co.
Industrial Process Engrg.
Lennard Co.
Parr Instr. Co.
Precision Scientific
Pressure Prods. Industries
Quaid Fabricators
Ruska Instr. Corp.
Will Corp.

AUTO-COLLIMATORS

Acme Industrial
Alfa Amer. Corp.
Align-A-Scope, Inc.
Amer. Instr. Co.
Bray Optical
Bronoptics Co.
Brunson Instr.
Buhl Optical
Clark & Sons
Davidson Mfg.
Dusenbery Co.
Engis Equip. Co
Ercona Corp.
Farrand Optical
Fecker, Inc.
Fish-Schurman
Gaertner Scientific
Garlynn Engrg.
Georator Corp.
Gordon Enterprises
Griswold Mfg.
Gurley, W. & L. E.
Henson Co.
Jarrell-Ash
Kollmorgen Optical
Lab. Optical
Lindly & Co.
Los Angeles Scientific
Meyer-Opticraft
Northrop Anaheim
Optical Service & Devel
Opto-Metric Tools
Pacific Optical Corp.
Palos Optical
Pan-technics, Ltd
Parr Instr. Co.
Penn Optical & Instr.
Perkin-Elmer
QOS Corp.
Unertl Optical
Zeiss, Inc., Carl
Zoomar Corp.

AUTOMOTIVE SERVICE INSTRUMENTS, see Engine Test Instruments

AUTOTRANSFORMERS, see Transformers, Variable

AVIATION Airborne, see Aircraft Instruments

AVIATION INSTRUMENTS, Ground

Advanced Products Co.
Aero Electronics
Aero Instrument Co.
Amer. Electronics
Applied Science Corp.
Assembly Products
Bendix Aviation Corp.
Boonton Radio
CDC Controls Services
Chicago Aerial Ind.
Colvin Labs.
Consolidated Avionics
Consol. Electrodynamics
Cook Electric
Davidson Mfg.
Dynametrics Corp.
Electro Instr., Inc.
Farnsworth Electronics
Fenwal, Inc.
Gadgets, Inc.
Gates Electronic Co.
GE Apparatus Sales
Geotechnical Corp.
Giannini & Co.
Gray Instrument Co.
I-L-S Instr. Corp.
Instruments Corp.
Inst. Corp. of Fla.
Kahn & Co.
Karnish Instrument
Kearfott Co.
Kollsman Instr. Corp.
Land-Air, Inc.
Lear, Inc.
Multi-Amp Corp.
Lewis Engrg. Co.
Narda Corp.
Norden-Ketay
North Atlantic Industs.
Pioneer Magnetics
Potter Aeronautical
Radio Receptor Co.
Revere Corp. of Amer.
Robertshaw-Fulton, Aeron.
Statham Instrs.
Sylvania Electronic
Taller & Cooper, Inc.
Tech. App. Builders
Texas Instrs., Inc.
Trans-Sonics, Inc.
Transval Engrg.
United Control Corp.
Voltron Products
WacLine, Inc.
Wakmann Watch Co.
Waldorf Instr. Co.
Waugh Engrg. Co.
Weksler Instrs.
Western Design & Mfg.
Westinghouse Electric

AXLE TESTERS

Eitzen Co., Louis C.
Olsen Testing Machine
Riehle Div.
Sperry Products

AZIMUTH INSTRUMENTS, see Navigation Aids

BALANCES (see also the Object of Measurement and Control)

Cahn Instr. Co.
Central Scientific
Chatillon & Sons

Detecto Scales
Dietert Co.
Fisher Scientific
Greiner, Emil
Heusser Instr. Mfg.
LaPine & Co., Authur S.
Metrogram Corp.
Ohaus Scale Corp.
Seederer-Kohlbusch
Taller & Cooper, Inc.
Testing Machines, Inc.
Triner Scale & Mfg.
Troemner, Henry
Voland & Sons, Inc.
Wabash Metal Prod.
Welch Mfg. Co., W. M.

BALANCES, Analytical and Precision for Weights and Measures

Ace Glass
Ainsworth & Sons
Amer. Balance
Arga Div.
Baird-Atomic
Becker Div., Christian
Brinkmann Instruments
Burke & James
Burrell Corp.
Cady & Co.
Central Scientific
Chatillon & Sons
Chicago App. Co.
Coleman Instr.
Detecto Scales, Inc.
Dietert Co.
Dynametrics Corp.
Exact Weight Scale Co.
Fisher Scientific
Franklin Electronics
Greiner, Emil
Gurley, W. & L. E.
Hadley Assocs.
Heusser Instr. Mfg.
Hunter Spring
Indust. Scientific Inc.
Jarrell-Ash
Kent Cliff Labs.
LaPine & Co.
Metrogram Corp.
Mettler Inst. Corp.
Microchemical Service
Microtech Services
National Instr. Co.
Ohaus Scale
Opplem Co.
Pfaltz & Bauer
Physics Research Labs.
Roller-Smith
Schaar & Co.
Scientific Balance
Seedburo Equipt. Co.
Seederer-Kohlbusch
Streeter-Amet
Taller & Cooper
Testing Machines, Inc.
Thomas Co., Arthur H.
Thompson Balance
Torsion Balance
Triner Scale & Mfg.
Troemner, Henry
Voland & Sons
Welch Mfg. Co., W. M.
Wilkins-Anderson Co.
Will Corp.

BALANCES, Automatic Recording

Amer. Balance
Avion Div.
Brinkmann Instruments
Burrell Corp.
Detecto Scales
Dynametrics Corp.
Dynamics Res. Assoc.
Engineering Res. & Devel.
Exact Weight Scale
Ferner Co., R. Y.
Fielden Instr. Div.
Franklin Electronics
Gilmore Industries
Hadley Assocs.
Ideal-Aerosmith
Indust. Electronics Engrs.
Indust. Scientific
Kent Cliff Labs.
Metrogram Corp.
Nalley Co.
Phoenix Prec. Instr.
Roller-Smith
Schaar & Co.
Seederer-Kohlbusch
Streeter-Amet
Taller & Cooper
Thayer Scale & Engrg.
Toledo Scale Co.
Voland & Sons
Will Corp.

BALANCES, Gas Density and Specific Gravity (see also Specific Gravity)

Amer. Balance
Baird-Atomic
Becker Div., Christian
Brinkmann Instruments
Burrell Corp.
Central Scientific
Chicago App. Co.
Eberbach & Son Co.
Electrical Devel.
Exact Weight Scale
Fisher Scientific
Greiner, Emil
Hadley Assocs.
Hagan Chem. & Control
Heusser Instr. Co.
Humboldt Mfg.
Indust. Scientific, Inc.
Kent Cliff Labs., Div.
Ohaus Scale
Pfaltz & Bauer
Roller-Smith
Schaar & Co.

Seederer-Kohlbusch
Std. Science Supply
Taller & Cooper, Inc.
Toledo Scale
Torsion Balance
Troemner Henry
Welch Mfg. Co., W. M.
Will Corp.

BALANCES, Hydrostatic

Amer. Balance
Central Scientific
Chicago App. Co.
Seederer-Kohlbusch
Welch Mfg. Co., W. M.

BALANCES, Magnetic

Allied Products Div.
Exact Weight Scale
Georator Corp.
Instrument Lab., Inc.
Seederer-Kohlbusch
Voland & Sons
Will Corp.

BALANCES, Magnetic (Geophysical)

Allied Products Div.
Askania-Werke, A. G.
Edin Electronics
Geophysical Instrument
Georator Corp.
Radionics, Inc.
Ruska Instr. Corp.

BALANCES, Micro

Ainsworth & Sons
Amer. Balance
Becker Div., Christian
Brabender Instrs.
Brinkmann Instruments
Burrell Corp.
Cady & Co.
Can. Rad. & Uran.
Central Scientific
Chatillon & Sons
Dynametrics Corp.
Exact Weight Scale
Franklin Electronics
Greiner, Emil
Heusser Instr. Mfg.
Indust. Scientific Inc.
Jarrell-Ash
Kent Cliff Labs., Div.
Mettler Inst. Corp.
Microchemical Service
Microtech Services
Opplem Co.
Pfaltz & Bauer
Schaar & Co.
Scientific Balance
Seederer-Kohlbusch
Thomas Co., Arthur H.
Torsion Balance Co.
Voland & Sons
Wilkens-Anderson
Will Corp.

BALANCES, Surface Tension

Amer. Balance
Brinkmann Instruments
Central Scientific
Chatillon & Sons
Exact Weight Scale
Kent Cliff Labs.
Roller-Smith
Indust. Scientific
Seederer-Kohlbusch
Task Corp.
Torsion Balance Co.
Welch Mfg. Co., W. M.
Will Corp.

BALANCES, Westphal

Amer. Balance
Becker Div., Christian
Central Scientific
Chicago App. Co.
Fisher Scientific
Greiner, Emil
Indust. Scientific
Kent Cliff Labs.
Pfaltz & Bauer
Torsion Balance Co.
Seederer-Kohlbusch
Troemner, Henry
Welch Mfg. Co., W. M.
Will Corp.

BALANCING MACHINES, Dynamic

Aero Electronics
Annis Co.
Bear Mfg. Co.
Cosa Corp.
Decker Aviation Corp.
DoAll Co.
Electronic Corp.
Exact Weight Scale
Ferner Co.
GE, Apparatus Sales
Gisholt Mach. Co.
Globe Tool & Engrg.
Hickok Electcl. Instr.
Instr. Assocs.
Internat. Res. & Devel.
Kahn & Co.
Micro Balancing, Inc.
Olsen Testing Machine
Orban Co., Kurt
Pacific Scientific
Panoramic Radio Prods.
Raydyne Corp.
Stewart-Warner
Taller & Cooper, Inc.
Ten Bosch Inc.
Warren Bros. Mfg.
Westinghouse Electric

BALANCING MACHINES, Static

Annis Co.
Best Mfg.
Chatillon & Sons
Cosa Corp.
Crown Indust. Prods.
Dynametrics Corp.
Exact Weight Scale
Ferner Co.
Gelber & Sons, Inc.
Gisholt Machine
Globe Tool & Devel.
Industrial Electronics
Internat. Res. & Dev.
Micro-Poise Engrg.
Olsen Testing Machine
Pacific Scientific
Raydyne Corp.
Stewart-Warner
Sundstrand Mach. Tool Co.
Taller & Cooper, Inc.
Taylor Dynamometer
Toledo Scale

BALLAST TUBES, see Current Regulators

BALLISTIC INSTRUMENTS, Crime Detection, see Criminology Lab. Apparatus

BALLISTIC INSTRUMENTS, Electrical

ACF Electronics
Allegany Inst. Co.
Atlantic Research Corp.
Berkeley Div.
Cal-Tronics Corp.
Cambridge Instr. Co.
Chesapeake Instr. Co.
Control Devices Inc.
Davenport Mfg.
Detectron Co.
Dynametrics Corp.
Epsco, Inc.
Farnsworth Electronics
Fecker, Inc.
Feedback Controls
GE
Gulton Mfg.
Hickok Electcl. Instr.
Kay Electric
Kistler Instr. Corp.
Leeds & Northrup
Librascope, Inc.
Micro Balancing, Inc.
Minneapolis-Honeywell Rubicon Instrs.
Northrup Anaheim
Potter Instr. Co.
Prec. Thermom. & Insts.
Radiation Res. Corp.
Rawson Electrical Instr.
Sensitive Research Instr.
Task Corp.
Tepp Industries
Triplett Electcl. Inst.
Walkirt Co.
Westinghouse Electric
Wiancko Engrg. Co.

BALLISTIC INSTRUMENTS, Ordnance, see Ordnance

BALLS, Bronze, Monel, etc.

Allmetal Screw Products
Burlington Instr.
GE, Metall. Prods. Dept.
Hartford Steel Ball
Haynes Stellite
Indust. Tectonics
PIC Design Corp.
Schnitzer Alloy Prods.

BALLS, Glass

Bache & Company, Semon
Can. Rad. & Uran.
Edna Lite Optical Co.
Fish-Schurman
Geophysical Instr. Co.
Hartford Steel Ball Co.
Herron Optical
Industrial Tectonics
Jones Optical
Optics Div., Texas Instr.
Owens-Illinois
Phoenix Prec. Instr.
Popper & Klein
Prec. Glass Prods.
Regal Instr. Co.

BALLS, Sapphire

Amer. Laubscher
Bird & Co.
Elgin Natl. Watch
Gallien, R. P.
Imetra Co., Ltd.
Indust. Tectonics
Instrument Products
Jones Optical
Keller & Co.
Keller, Jr., Hugo P.
Linde Co.
Lynn, Robert M.
Optics Div.; Texas Instr.
Swiss Amer. Jewel Bear.
Vallorbs Jewel Co.
Worley Jewel Co.

BALLS, Stainless Steel and/or Steel, Polished (0.5mm min. dia.)

Albany Prods. Co.
Anti-Corrosive Metal Prods.
Beamco, Inc.
Eastern Specialty Co.
Eitzen Co., Louis C.
Fafnir Bearing
GE
Harris & Co.
Hartford Steel Ball
Indust. Tectonics
Landis & Gyr
New Departure Div.
N. H. Ball Bearing
Norma-Hoffman
PIC Design Corp.
Schnitzer Alloy Prods.
Swiss Jewel Co.

BALSAM

Aerovox Corp.
Bausch & Lomb

BANK and TURN INDICATORS, see Aircraft Instruments

BANK and TURN INDICATOR TESTERS, see Aircraft Instrument Testers

BAROGRAPHS, see Barometers, Recording

BAROMETERS, Altitude

AiResearch Mfg. Co.
Amer. Paulin
Amer. Thermo Ware
Askania-Werke, A. G.
Bendix, Eclipse-Pioneer
Bendix-Friez
Bowen & Co.
Bruning Co.
Burton Mfg. Co.
Dietzgen Co.
General Mills Inc.
Geotechnical Corp.
Germanow-Simon
Giannini & Co.
Green, Henry J.
H & H Thermostats
Hass Bros.
Ideal-Aerosmith
Ideal Lab. Tool
Indust. Scientific
Instr. Assocs.
Instruments Corp.
Keuffel & Esser
Kollsman Instr. Div.
Matisa Equipt. Co.
Meriam Instr. Co.
Mine Safety Appliances
Norden Instr. Co.
Norden-Ketay Corp.
Opplem Co.
Panoramic Radio
Post Co.
Prec. Thermom. & Insts.
RCA Div.
Scope Instr. Co.
Servomechanisms, Inc.
Sperry-Sun Well Surveying
Square D Co.
Stratex Instr. Co.
Taylor Instr. Cos.
Technicraft Engrg. Co.
Thermometer Corp.
Thwing-Albert
Uehling Instr. Co.
Wallace & Tiernan
Warren Knight
Welch Mfg. Co., W. M.
Westinghouse Electric
White Co.
Wiancko Engrg. Co.

BAROMETERS, Aneroid

Amer. Paulin
Amer. Thermo Ware
Bacharach Indust. Instr.
Bendix, Eclipse-Pioneer
Bendix-Friez
Burton Mfg. Co.
Central Scientific
Dietzgen Co.
Fisher Scientific
Germanow-Simon
Green, Henry J.
Hiergesell & Sons
Ideal Lab. Tool
Indust. Scientific
Instruments Corp.
Keuffel & Esser
Kollsman Instr. Corp.
Mine Safety Appliances
Negus, T. S. & J. D.
Post Co.
Scientific Instr. Co.
Scope Instr. Corp.
Seegers Mfg.
Serdex, Inc.
Square D Co.
Standard Thermometer Ins.
Stewart, M. C.
Swift & Anderson
Taylor Instr. Cos.
Thermometer Corp.
Wallace & Tiernan
Warren Knight
Welch Mfg. Co., W. M.
White Co.

BAROMETERS, Mercurial

Alpha Instr. Co.
Amer. Paulin
Bendix, Eclipse-Pioneer
Bendix-Friez
Builders-Providence
Central Scientific
Chicago Apparatus Co.
Dietert Co.
Eberbach & Sons
Fish-Schurman
Fisher Scientific
Gaertner Scientific
Green, Henry J.
Greiner, Emil
Greiner Glassblowing Lab.
Hass Bros.
Hiergesell, Wm. & Sons
Ideal-Aerosmith
Ideal Lab. Tool
Indust. Scientific
Instruments Corp.
Kollsman Instr. Div.
Manning, Maxwell & Moore
Meriam Instr. Co.
Moeller Instr. Co.
Negus, T. S. & J. D.
Prec. Glass Prods.
Prec. Thermom. & Insts.
Sargent & Co.
Scientific Glass App.
Scientific Instr. Co.

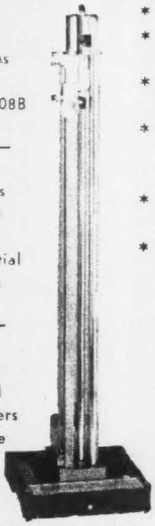
PRECISION—MERCURIAL BAROMETERS—MANOMETERS

AVAILABLE WITH ANY OR ALL OF THESE FEATURES:

Conforms to Spec. Mil-B-4308B

Measures Absolute or Differential Pressures

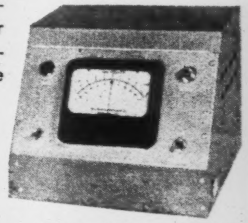
Primary Standard Barometers Available



31" Type A-1 Barometer

- * Range 0-31", 0-62" and 0-105" inches of mercury.
- * Complete Temperature and gravity compensation.
- * Direct true pressure readings with accuracy guaranteed to .02% of full scale.
- * Manual Sighting or Photo Electric Scanner indicating pressure changes of less than 0.01 mm mercury.
- * Stop-bar mechanism for production testing at predetermined points.
- * Choice of scale graduations: inches, millimeters, millibars, altitude or special.

Used by the U. S. Air Force, and instrument manufacturers for the calibration of Altimeters, Air Speed Indicators, Automatic Pilots, Altitude Switches, Thrust Meters, Machmeters, Air Data Computers, etc.



Amplifier for Photo Scanner

Phone Hickory 9-5454

For more information or special application write to:

THE HASS INSTRUMENT CORPORATION
6173 BRANCH AVENUE WASHINGTON 23, D. C.

For more information circle 39 on inquiry card.

For ALL your dry battery needs

BURGESS

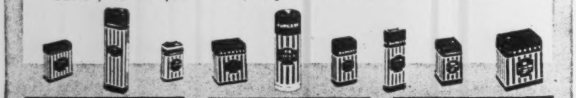
Serves You Better!

MOST COMPLETE LINE OF STANDARD BATTERIES

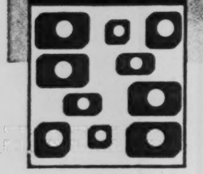
2 out of 3 industrial-electronic engineers specify Burgess Batteries! That's because the Burgess line of dry batteries is the most complete and dependable one-source line on the market! There's a Burgess Battery for almost every conceivable dry battery application. Choose from over 5,000 types already designed.

FREE DESIGN SERVICE FOR NEW APPLICATIONS

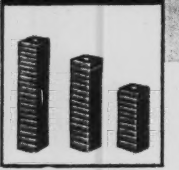
For those special applications, skilled Burgess Engineers offer you a FREE design consultation service. When your particular problem has been solved, Burgess will manufacture the exact battery to fit your needs, regardless of quantity required!



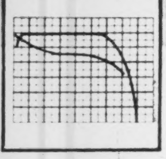
CHOOSE FROM MANY CELL SIZES



UNLIMITED RANGE OF VOLTAGES



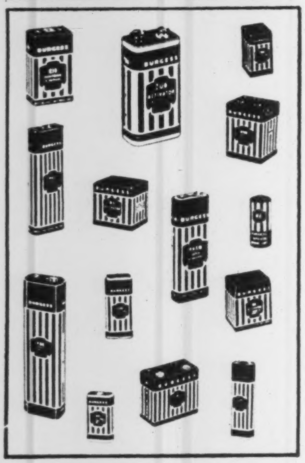
CAPACITY TAILORED TO YOUR APPLICATION



BURGESS Exclusive WAFER CELL CONSTRUCTION Gives Greatest Selection of Dry Batteries

The revolutionary Wafer Cell offers a 30% increase in battery life at no increase in size. This exclusive Burgess construction consists of a sandwich of manganese dioxide mix between two flat electrodes of zinc and carbon with spots of hot silver wax applied to each exposed pole of the cell, allowing perfect electrical contacts throughout and almost complete absence of vibration. Cells are wrapped in Mylar film and packed in such modern materials as aluminum for compactness, long shelf life, exceptional service life, outstanding dependability.

HUNDREDS OF TYPES AVAILABLE



TRANSISTOR ACTIVATORS

Burgess Activator Batteries for transistor circuits are smaller and more compact in size. Yet they deliver 30% more power because of the patented "wafer-cell" construction. Burgess Activators give you compact power, uniform performance, longer shelf life . . . . all combined with modern packaging.

RESERVE BATTERIES

Can be stored dry for years. Activated only when immersed in water. No handling of dangerous electrolyte, no spilling or leaking! Wider range of efficient operating temperatures than any other type of battery.

Send for Engineering Data on Dry Batteries and Free Specifications Check Chart

BURGESS BATTERY COMPANY

FREEPORT, ILLINOIS

For more information circle **40** on inquiry card.

Standard Science Supp.
Stoelting Co.
Taylor Instr. Cos.
Thermometer Corp.
Trimount Instr. Co.
Uehling Instr. Co.
Universal X-Ray Prods.
Wallace & Tiernan
Weksler Instrs.
Welch Mfg. Co., W. M.
Weston Instrs.

BAROMETERS, Recording

Alden Products
Alfax Paper & Engrg.
Amer. Paulin
Amer. Thermo Ware
Askania-Werke A. G.
Bacharach Indust. Instr.
Bendix-Friez
Bristol Co.
Dickson Co.
Dietzgen Co.
Dynametrics Corp.
Foxboro Co.
Geotechnical Corp.
Green, Henry J.
H & H Thermostats
Hathaway Instr. Co.
Ideal-Aerosmith
Ideal Lab. Tool
Impact Register Co.
Indust. Scientific
Instruments Corp.
Keuffel & Esser
Minneapolis-Honeywell
Moeller Instr. Co.
Penn Insts. Div.
Scientific Instr. Co.
Serdex, Inc.
Taylor Instr. Cos.
Trerice Co., H. O.
Uehling Instr. Co.
United Scientific

BAROMETERS, Station

Amer. Paulin
Bendix-Friez
Burton Mfg. Co.
Dynametrics Corp.
Geotechnical Corp.
Green, Henry J.
Ideal-Aerosmith
Ideal Lab. Tool
Instruments Corp.
Kollsman Instr. Corp.
Manning, Maxwell & Moore
Moeller Instr. Co.
Rec. Thermom. & Insts.
Seegers Mfg.
Square D Co.
Taylor Instr. Cos.
Universal X-Ray Prods.
Wallace & Tiernan

BAROMETRIC PRESSURE RECORDERS, see Barometers, Recording

BATHS, Calibration and Testing, including Water and Oil (see also Temperature Calibration)

Ace Glass
Advanced Insts.
Amer. Instr. Co.
Amer. Research Inc.
Apex Scient.
Barnstead Still & Ster. Co.
Bayley Instr. Co.
Blue M Electric
Bowser Inc.
Brabender Instrs.
Chicago App. Co.
Coleman Instr. Co.
Electric Hotpack
Fish-Schurman
Fisher Scientific
Gardner Lab.
Greiner, Emil
Hallikainen Instruments
Ideal. Lab. Tool
Indust. Scientific
Kahn & Co.
Koehler Instr. Co.
Labline Inc.
LaPine & Co.
Modern Lab. Equipt. Co.
Murphy & Miller
Precision Scientific
Process & Instruments
Res. Appl. Co.
Research Specialties
Ruska Instr. Corp.
Standard Cabinet Co.
Std. Electronic Res.
Tenney Engrg. Co.
Temp. Engrg. Corp.
Victory Engrg. Corp.
Wilkens-Anderson Co.
Yellow Springs Instr. Co.

BATTERIES, Dry

Allied Engrg. Div.
Burgess Battery
Edison, Inc., T. A.
GE Spec. Electronic
Interelectronics Corp.
Kellogg Switchboard
Linde Co.
Magnavox Co.
Mallory & Co., P. R.
Marathon Battery
National Carbon
Newark Electric Co.
Philco Corp.
RCA Tube
Ray-O-Vac
Walker-Jamieson

BATTERIES, Mercury

Amer. Mach. & Foundry
Elgin Nat'l. Watch Co.
Interelectronics Corp.
Linde Co.
Magnavox Co.
Mallory, Battery Div.
National Carbon
RCA Tube

BATTERIES, Radioactive

Nuclear Corp. of Amer.
Ohmart Corp.
Radiation Res. Corp.
Tracerlab Inc.
U. S. Radium

BATTERIES, Solar

Internat. Rectifier Corp.
Texas Insts., Inc.

BATTERIES, Storage

Amer. Hard Rubber
Baker & Co.
Edison, Inc., T. A.
Goodyear Tire
Greiner Co., Emil
Gulton Industries
Interelectronics Corp.
U. S. Rubber
Std. Elect. Time Co.
Waterbury Battery Co.
Yardney Electric

BATTERY CHARGERS

Acme Electric
Adler Electronics
Allied Engrg. Div.
Allied Radio
Amer. Electronic Labs.
Amer. Television & Radio
Auto. Electric Sales
Automatic Electric
Autom. Switch Co.
Bendix, Eclipse-Pioneer
Bogue Electric Mfg.
Brit. Electronic Sales
Christie Electric
Control Corp.
Control Panel Corp.
Cornell-Dubilier
Cutler-Hammer
Del Electronics
Electric Heat Control
Electronic Instr. Co.
Electronic Measmts. Co.
Electronic Rectifiers
Electrosig Corp.
Fansteel Metallurgical
Federal Telephone & Radio
Femco, Inc.
Ferranti Electric
Fisher Scientific
Gates Electronic
GE, Apparatus Sales
GE, Low Volt. Switchgr.
Georator Corp.
Green Rectifier Co.
Indust. Control Panel Co.
Indust. Rectifier Devices
Kellogg Switchboard
Kepco Labs.
Knopp Inc.
LaMarche Mfg. Co.
Lectronic Research Labs.
Macarr, Inc.
Mallory & Co., P. R.
Magnetic Instr. Co.
Magnetic Research Corp.
Model Rectifier Corp.
NJE Corp.
Newark Electric Co.
North Electric
Northeastern Engrg.
Opad Electric
Perkin Engrg. Co.
Power Supplies
Radio Receptor Co.
Radionics, Inc.
Raytheon Mfg.
Schauer Mfg.
Sel-Rex Corp.
Sorensen & Co.
Standard Elec. Time
Std. Transf. Corp.
Sun Electric
Syntron Co.
Technical App. Builders
Thompson Clock
Thordarson-Meissner
Transistor Devices
U. S. Instrument
Walker Div.
Ward Leonard
Westinghouse Electric
Yardney Electric Corp.

BATTERY ELIMINATORS

Allied Engrg. Div.
Amer. Television & Radio
Assembly Products
Auto. Electric Sales
Automatic Electric
Bogue Electric Mfg.
Brit. Electronic Sales
Consol. Engrg. Co.
Cornell-Dubilier
Davenport Mfg.
Electronic Instr. Co.
Electro Products Lab.
Electronic Prods. Co.
Electrosig Corp.
Empire Devices
Federal Telephone & Radio
Gates Electronic
GE
General Radio
Green Rectifier Co.
Hagan Chem. and Controls
Indust. Rectifier Devices
Interelectronics Corp.
Kahn & Co.
Kellogg Switchboard
Kepco Labs.
LaMarche Mfg.
Macarr, Inc.
Magnetic Instr. Co.
Mallory & Co., P. R.
Model Rectifier
NJE Corp.
National Time & Signal
Newark Electric
Opad Electric
Perkin Engrg. Co.
Peschel Electronics
Raytheon Mfg.
RCA Div.
Sargent & Co.
Schauer Mfg.
Sorensen & Co.
Standard Elect. Time Co.
Std. Transf. Corp.
Sun Electric Corp.
Technical App. Builders
Thordarson-Meissner
U. S. Instr. Corp.
Universal Transistor
Virginia Electronics
Walker Div.

BATTERY TESTERS

Aerotronic Assocs.
Amer. Mach. & Foundry
Christie Electric Co.
Chicago Industrial
Clough-Brengle
Daven Co.
Edelman & Co.
Electro-Mech. Instr.
Electro-Tech Equip.
Electronic Devel. Lab.
Electronic Instr. Co.
Erwood, Inc.
Fisher Res. Lab.
GE
G. M. Mfg. Co.
Gates Electronic Co.
Goldak Co.
Green Rectifier Co.
Griebel Co.
Helipot Div.
Hickok Electcl. Instr.
Imperial Brass
Instrument Labs.
Kimble Glass
Larson Instr. Co.
Non-Linear Systems
Opad Electric
Owens-Illinois
Prec. Thermom. & Insts.
Radio City Products
Radio Corp. of Amer.
Rascher & Betzold
Simpson Electric
Sterling Mfg. Co.
Sun Electric
Sunshine Scientific
Technical App. Builders
Triplett Elect. Instr.
United Mfg. Co.
Weston Electcl. Instr.

BEAM COMPASSES, see Drawing Instruments

BEARING CIRCLES

Alpha Instr. Co.
Dusenbery Co.
Eastern Specialty Co.
Georator Corp.
Gurley, W. & L. E.
Halax Corp.
Kollmorgen Optical
Marine Compass Co.
Meyer-Opticraft
Negus, T. S. & J. D.
Ritchie & Son

BEARING TEMPERATURE INSTRUMENTS, including Alarms

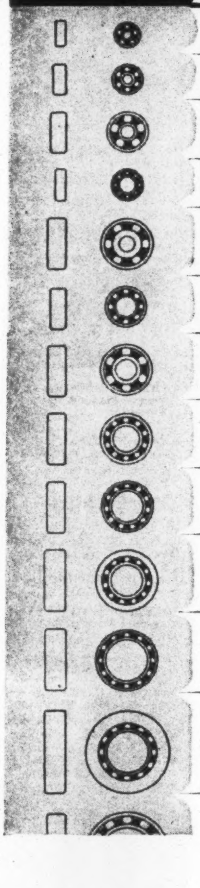
Aero Research
Arnoux Corp.
Assembly Products
Autron Engrg., Inc.
Bogue Electric Mfg.
Bristol Co.
Burling Instr. Co.
Cal-Ohm Labs.
Cardinal Instrumentation
Cole Instr. Co.
Cooper Co., Clark
Cybertronic Corp.
Edison Inc., Thomas A.
Electro Devices (St. Louis)
Electron-Radar Prods.
Elematic Equipt. Corp.
Fenwal, Inc.
Fielden Instr. Div.
Hagan Chem. & Controls
Hallikainen Insts.
Harco Labs.
Henschel Corp.
Illinois Testing Labs.
Industrial Control Panel
Kybernetes Corp.
Larson Instrument
Leeds & Northrup
Lewis Engrg. Co.
Mack Electric Devices
Manning, Maxwell & Moore
Meroid Corp.
Minn.-Honeywell Ind. Div.
Moeller Instr. Co.
Norden-Ketay
Norwood Controls
Panellit, Inc.
Phila. Scientific Glass
Powers Reg. Co.
Prec. Thermom. & Insts.
Pyro-Electric
Pyrometer Instr. Co.
Royco Instruments
Scalco Controls
SCAM Instr. Corp.
Servo Corp. of Amer.
Synchro-Start Prods.
Tell-Tronics Prods.
Thermo-Electric Co.
Tipp-Tronic, Inc.
Tigerman Engrg. Co.
Trerice Co., H. O.
United Electric Controls
Victory Engrg. Corp.
Viking Instruments
Weksler Thermometer
West Instr. Corp.

ND FACTS

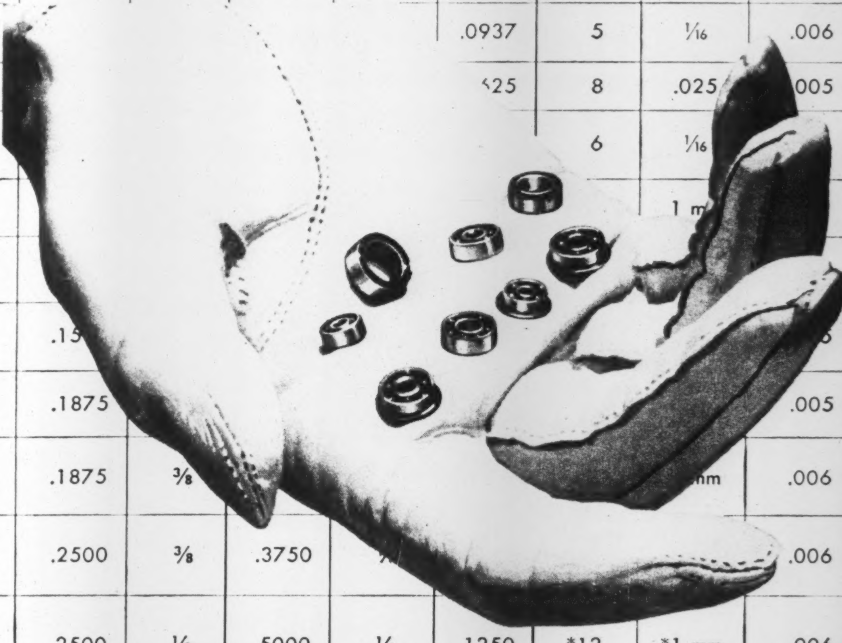
TINY SIZE...
TREMENDOUS IMPORTANCE!

New Departure has many years of experience in the manufacture of ball bearings to the finest ultra-precision tolerances. And . . . New Departure uses the most advanced equipment for research, development and production in making a full range of bearings of precision instrument classification. A new catalog, including miniature sizes, plus additional information helpful to you in design problems sent on request. Write New Departure, Division of General Motors, Bristol, Conn.

ASK FOR CATALOG P.I.B.



FULL SIZE	BORE B		DIAMETER D		WIDTH W		BALLS		CORNER RADIUS r (To Clear)
	FRACTION	DECIMAL	FRACTION	DECIMAL	FRACTION	DECIMAL	NO.	DIAMETER	
	³⁄₆₄	.0469	⁵⁄₃₂	.1562	¹⁄₁₆	.0625	5	¹⁄₃₂	.005
		.0550	³⁄₁₆	.1875	⁵⁄₆₄	.0781	6	1 mm	.005
	⁵⁄₆₄					.0937	5	¹⁄₁₆	.006
	³⁄₃₂					25	8	.025	005
	³⁄₃₂						6	¹⁄₁₆	
	⅛							1 m	
	⅛								
	⁵⁄₃₂	.15							
	³⁄₁₆	.1875							.005
	³⁄₁₆	.1875	⅜					mm	.006
	¼	.2500	⅜	.3750					.006
	¼	.2500	½	.5000	⅛	.1250	*12	*1 mm	.006



GM FORWARD FROM FIFTY

NEW DEPARTURE

DIVISION OF GENERAL MOTORS, BRISTOL, CONN.

NOTHING ROLLS LIKE A BALL

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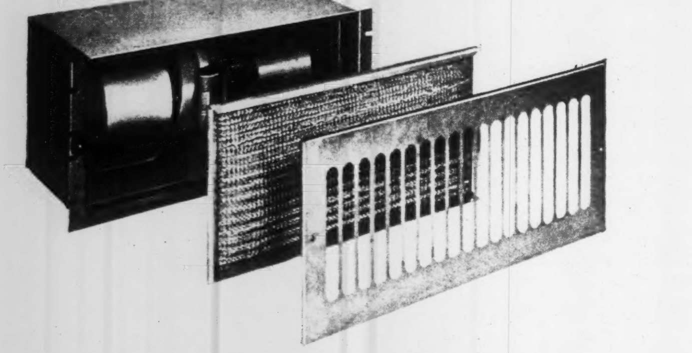
McLEAN
Your Best Source For...

RACK MOUNTED
FANS and BLOWERS*

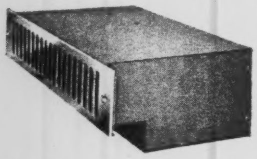
*PATENTED



STANDARD RACK MOUNTED FANS & BLOWERS

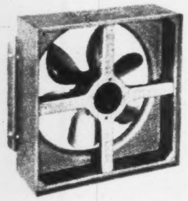
Over 15 models available in panel heights of 3½" to 12¼" in increments of 1¾". Range, 80 to 1200 cfm. All units feature quiet operation, no electrical noise and maximum air delivery. Blower units provide better air delivery against pressure and higher velocity for faster cooling. Highly reliable, rubber mounted, 115 volts, 60 cycle motors. Also Mil. Spec. and DC motors available. Permanent filters. Smart, heavy gauge, stainless steel grilles.

RECESSED MODELS



Provide higher performance with minimum panel height. Filter and blower are recessed into the unused portion of the open base commercial type rack. Fit 3½", 5¼", 7", 8¾" and 10½" panel heights and deliver 150 cfm to 1200 cfm. Highly reliable, rubber mounted, 115 volts, 60 cycle motors. Mil. Spec. and DC motors available. Permanent filters.

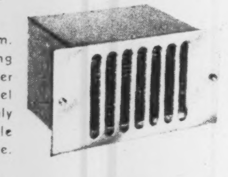
REVERSIBLE FAN

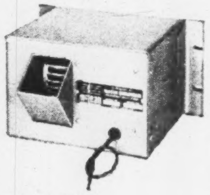


Easy-to-install Filter Box Propeller Fan gives wide choice of cfm's and great mounting flexibility. Operates as blow or suck without rework. Compact, low-cost. Long, service-free life. Operates from various power sources.

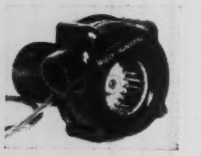
HALF PANEL WIDTHS

For narrow racks or where space is a problem. Fit half the width of standard 19" racks leaving balance of space for other components. Blower model (5¼" high) delivers 100 cfm. Fan model (7" high) delivers 225 cfm. Powered by highly reliable, rubber mounted, 115 volts, 60 cycle motors. Mil. Spec. and DC motors available. Permanent type filter.





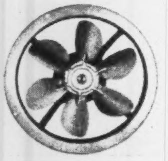
HALF PANEL WIDTH FILTER-GRILLE ASSEMBLIES ALSO AVAILABLE



MIL. SPEC. BLOWERS

Meet most rigid specifications. Mount in any position. Deliver 10 cfm. Fit 3¾" cube. Continuous duty, totally enclosed motor, 1/300 hp. 115 volts, 60 cycle, 3400 rpm.

FREE! Engineering Booklet on Forced Air Cooling. Describes air convection methods. Includes design data, tables, charts, etc.



RING TYPE FANS

175 to 395 cfm. Fan diameter 6½" and 8 Motors totally enclosed, highly reliable, 115 volts, 60 cycle, 3000 rpm. Mil. Spec. and DC motors available Other sizes available.

FREE! 34 page catalog loaded with helpful data. Shows complete line of fans, blowers.

McLean Engineering Laboratories
Princeton, New Jersey • Walnut 4-4440
TWX Princeton, New Jersey 636

McLean

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BEARING TESTERS, Including Bearing Testing Machines

Arlin Products
Baker Co.
Baldwin-Lima-Hamilton
Bendix, Eclipse-Pioneer
Electro-Mec Lab.
Elgin Natl. Watch
Engineering Res. & Devel.
Engis Equipt. Co.
Erdco Engrg.
Erwood, Inc.
Fafnir Bearing Co.
GE
Hirschmann Co.
Illinois Testing Labs.
Koehler Instr. Co.
Krouse Testing Mach.
Leitch-Huard Corp.
Lennard Co., Inc.
Lessells & Assocs.
Librascope, Burbank Div.
Micrometrical Mfg. Co.
Olsen Testing Machine
Orban Co., Kurt
Panoramic Radio Prods.
Physics Research
Sheffield Corp.
Sperry Products
Sunshine Scientific
Tipp-Tronic, Inc.
Vectron, Inc.

BEARINGS, Agate

Amer. Laubscher
Duotone Co.
Engis Equipt. Co.
Gallien, R. P.
Geophysical Instr. Div.
Grobet File Corp.
Hamilton Watch
Imetra Co. Ltd.
Industrial Jewel Bearing
King Gem Co.
Lynn, Robert M.
Moser Jewel Co.
PIC Design Corp.
Powers, George
Regal Instr. Co.
Swiss Amer. Jewel-Bear.
Swiss Jewel Co.
Vallorbs Jewel Co.
Worley Jewel Co.

BEARINGS, Ball, including Miniature, Roller

Ace Plastic Co.
Barden Corp.
Boston Gear Works
Elgin Natl. Watch
Engis Equipt. Co.
Fafnir Bearing Co.
Federal Bearings
Ferner Co.
GE
Hartford Steel Ball
Indust. Techtonics
Keller, Jr., Hugo P.
Keller & Co., L. H.
Landis & Gyr, Inc.
Lignum Vitae
Marlin-Rockwell
McGill Mfg.
Microtech Corp.
Miniature Prec. Bear.
New Departure Div.
N. H. Ball Bearings
Norma-Hoffman
PIC Design Corp.
Reed Instr. Bearing
Split Ballbearing
Thomson Industries
U. S. Gasket Co.
Vallorbs Jewel Co.

BEARINGS, Jewel, see Jewels

BEARINGS, Precious Metal

Amer. Platinum Wks.
Amer. Silver Co.
Baker & Co.
Bayside Watch Tool
Bird & Co.
Bishop & Co., J.
Duotone Co.
Halax Corp.
Hamilton Watch
Industrial Jewel Bearing
Indust. Techtonics
Keystone Carbon Co.
Mallory & Co., P. R.
Metals & Controls
Ney Co.
Permco Products Corp.
Research Dev. Mfg.
Vallorbs Jewel Co.
Wilson Co.

BEARINGS, Ring

Bayside Watch Tool
Bird & Co.
Eaton Mfg. Reliance Div.
Elgin National Watch
GE
Halax Corp.
Keller, Jr., Hugo P.
Keller & Co.
Mallory & Co., P. R.
Newall Mfg.
Ohio Carbon Co.
Research Dev. Mfg.
Stackpole Carbon
Swiss Amer. Jewel-Bear.
Swiss Jewel Co.
Vallorbs Jewel Co.
Worley Jewel Co., John

BEARINGS, Self Lubricating

Acushnett Process Co.
Bakelite Div.
Boston Gear Works, Inc.
Chemalloy Electronics Corp.
Continental-Diamond Fibre
Crane Packing Co.
Crowley & Co.
Graphite Metallizing
Industrial Tectonics
International Powder
Keystone Carbon Co.
Mallory & Co., P. R.
Moraine Prods. Div.
Morganite, Inc.
New Departure Div.
N. H. Ball Bearings
National Carbon Co.
Norma-Hoffman Bearings
Ohio Carbon Co.
PIC Design Corp.
Polymer Corp.
Raybestos-Manhattan
Richardson Co.
Spaulding Fibre Co.
Thomson Industries
U. S. Gasket Co.

BELLOWS, Kovar

Breeze Corporations
Bristol Co.
Fulton-Sylphon Div.
Giannini & Co.
Stupakoff Div.

BELLOWS, Metallic, including Stainless Steel

Alloy Bellows Engrg.
Askania Reg. Co.
Barton Instr. Corp.
Belfab Corp.
Bendix Aviation Corp.
Breeze Corporations
Bridgeport Thermostat
Bristol Co.
Clifford Mfg. Co.
Colvin Labs.
Cook Electric
Fielden Instr. Div.
Flexonics Corp.
Fulton-Sylphon Div.
Giannini Co.
Hammel-Dahl
Jadow, Inc., B.
Kendall Controls
Manning, Maxwell & Moore
PIC Design Corp.
Patterson Co., Wayne D.
Power Engrg. & Equipt.
Res. Appliance Co.
Summers Gyroscope
TempFlex Co.
Titeflex, Inc.
U. S. Gauge Div.
Robertshaw Fulton

BELLOWS, Plastic

Burke & James, Inc.
Chicago Rawhide Mfg.
Crane Packing Co.
Garlock Packing Co.
Res. Appliance Co.
Sentinel Glass Co.
U. S. Gasket Co.

BELLOWS, Thermostatic

Belfab Corp.
Bridgeport Thermostat
Bristol Co.
Chicago Metal Hose Corp.
Clifford Mfg.
Cook Electric
Flexonics Corp.
Fulton-Sylphon Div.
General Plate Div.
Giannini & Co.
Hoffman Specialty Mfg.
Mercoid Corp.
Robertshaw-Fulton
Seamlex Company, Inc.
United Electric Controls

BENCHES, Optical, see Optical Benches

BENDING MACHINES, see Machines, Metal Forming

BEVEL PROTRACTORS, see Drawing Instruments

BEZELS

American Emblem Co.
Bayside Watch Tool
Croname, Inc.
Drake Mfg.
DuMont Labs., Allen B.
Electronic Tube Corp.
Erie Resistor
Etched Products Corp.
Grammes & Sons
Grigoleit Co.
Jan Hardware Mfg.
Maryland Etching Co.
Meyer-Opticraft
Millen Mfg. Co.
Modern Technical Supp.
Molded Insulation Co.
National Co.
New Haven Clock
Park Nameplate Co.
Pioneer Instr. Div.
Santay Corp.
Scovill Mfg. Co.
Swift & Anderson
Wadsworth Watch Case
Waterbury Companies
Weber Bros.

BIMETALLIC ELEMENTS, see Thermostatic

BIN LEVEL INDICATORS, see Level Indicators, Bin and Bulk Material

BINAURAL TIMERS, see Timers, Binaural

BOILER ROOM INSTRUMENTS

- Electrolytic conductivity apparatus for steam and condensate degassing.
- Boiler Feedwater measurements.
- A complete line of recording instruments available in line and battery powered models.
- Salinity detecting and controlling equipment.
- Condenser leakage detectors.

Write for complete catalog

Industrial Instruments Inc.

89 Commerce Road Cedar Grove, Essex County, N. J.

For more information circle **43** on inquiry card.

Bailey FEED WATER Control

- Bailey Meter Company offers three distinct feed water control systems. They are:

(1) The Thermo-hydraulic Feed Water Regulator which is suitable for small boilers operating at relatively low pressures. Operates from water level alone and offers low installation costs, removable valve parts, and independence of valve location.

Request Product Specification M85-1.

(2) The Single-Element Air-Operated Feed Water Control System is recommended for installations on which smooth regulation of feed water flow is desired, and a wide regulating range can not be used. Controlled from water level alone as measured by a Bailey Water Level Recorder.

Request Bulletin 106.

(3) The Bailey Three-Element Feed Water Control is recommended for high capacity, low water storage boilers operating at high pressures or for boilers operating at medium pressures with violent load fluctuations. Operated from actual measurement of water flow to the boiler, steam flow from the boiler, and water level within the boiler. It is adjusted to control the rate of water flow to the boiler so that it equals the rate of steam flow from the boiler.

Request Bulletin 105.

BAILEY METER COMPANY
1041 IVANHOE ROAD · CLEVELAND, O
Bailey Meter Company Ltd., Montreal, Canada

For more information circle **44** on inquiry card.

BINNACLES, see Navigational Instruments

BINOCULARS

Alpha Instr. Co.
Amer. Thermo Ware
Bausch & Lomb
Bendix, Eclipse-Pioneer
Bray Optical Co.
Bronoptics Co.
Bushnell Optical
Clark & Sons
Du Maurier Co.
Edmund Scientific
Ercona Corp.
Esco Products
E&W Optical Co
Fecker, Inc.
Griswold Mfg. Co
Gordon Enterprises
Helio Instr. Co.
Indust. Scientific, Inc
Kollsman Instr. Corp
Leitz, Inc.
Meyer-Opticraft
Negus, T. S. & J. D
Nikon, Inc.
Opplem Co.
Scope Instr. Corp
Swift & Anderson
Unertl Optical
Warren Knight
White Co.
Wollensak Optical
Ziess, Inc., Carl

BINOCULARS, including Polarizing, Variable Density, etc.

Bausch & Lomb
Bushnell Optical
Edmund Scientific
Gordon Enterprises
Jarrell-Ash
Kollmorgen Optical
Kollsman Instr. Corp
Polarizing Instr. Co
QOS Corp.
Unertl Optical

BINS, Small Parts

Falstrom Co.
Federal Screw Prods
Gold Seal Mfg.
Hall Co.
Littleford Bros
Regal Plastic Co
Std. Pressed Steel Co
United Show Mach
Valley-National

BLACK LIGHT, see Infrared Sources

BLAST METER, see Flowmeters, Gas, also Pressure Indicators, Peak

BLOCKS, Fuse, see Fuse Blocks

BLOCKS, Gage, see Dimensional Gages, Mechanical

BLOCKS, Terminal, see Terminal Blocks

BLOWERS & FANS, Equipment Cooling

Heinze Electric
McLean Engrg. Labs.
Niagara Blower Co
Western Design & Mfg
Western Devices

BOARDS, Bread, see Breadboards

BOILER ROOM INSTRUMENTS, including Condenser Leakage, Damper, Desuperheat, Draft, Feedwater, Specialties, Steam, Stoker etc. (see also Combustion Safeguards, also Gas Analyzers)

Acro Mfg.
Air Assocs.
Askania Reg. Co.
Askania-Werke, A. G.
Atlas Valve Co.
Atwood & Morrill
Autom. Timing & Controls
B-I-F Industries
Beck Co.
Bailey Meter Co.
Barber Colman
Bar-Ray Products
Barton Instr.
Black Sivalls & Bryson
Boylston Co.
Bray Optical
Bristol Co.
Brooke Engrg. Co.
Brooks Rotameter
Builders-Providence, Inc.
B. W. Controller Corp.
Cal-Tronics Corp.
Campbell Co., J. A.
Cash Co., A. W.
Cash Valve Mfg. Corp.
Century Instr. Co.
Cleveland Controls
Climax Div.
Combustion Control Corp.
Conoflow Corp.
Continental Foundry
Cook Electric
Cutler-Hammer
Dahl & Co., G. W.
Davis Reg. Co.
Defender Instr. & Reg.
Denver Fire Clay Co.
De-Tec-Tronic Corp.
Dietz Co., Henry G.
Diamond Power Spec. Corp.
Dressen-Barnes
Dwyer Mfg.
Eclipse Fuel Engrg
Electronics Prods. Co
Ellison Draft Gage
Ess Instr. Co.
Fielden Instr. Div
Fischer & Porter Co
Fisher Governor
Foster Engrg. Co.
Foxboro Co.
Fulton-Sylphon Div.
General Controls
General Power Plant
General Reg. Corp.
Gleason-Avery
Hagan Chem. & Controls
Hammel-Dahl
Hays Corp.
Henszey Co
Industrial Instruments, Inc.
Jerguson Gage
Jo-Bell Products
Johnson Corp.
Johnson Service Co
Jordan Regulator Corp.
Kates Co., W. A.
Kaye & MacDonald
Kellogg Switchboard
Kieley & Mueller
Klipfel Valves
La Motte Chem. Prod.
Lapp Insulator
Larson Instr. Co.
Leeds & Northrup
Leslie Co.
Lumenite Electronic
Magnetrol, Inc.
Manning, Maxwell & Moore
Marsh Corp., Jas. P.
Mason-Neilan Div.
McAlear Mfg.
McDonnell & Miller
Mercoid Corp.
Mercon Reg. Co
Meriam Instr. Co.
Merritt Engrg. & Sales
Milton Roy Co
Minneapolis-Honeywell
  Boston Div.
Moore Products
National Co., Inc.
Natural Gas Equipt. Co
Northern Equipt. Co.
Penberthy Injector Co
Penn Insts. Div.
Penn Ind. Inst. Div.
Photo Crystals, Inc
Powers Reg. Co.
Preferred Utilities Mfg.
Reliance Gauge Column
Reliance Instr. Mfg.
Republic Flow Meters
Research Controls
Revere Corp.
Reynolds Gas. Reg.
Schade Valve Mfg.
Scientific Instr. Co
Scrayco Mfg. Co.
Security Valve Corp.
Seely Inst. Co., Inc.
Shallcross Mfg.
Shallcross Controls
Simplex Valve & Meter
Soreng Products
Spence Engrg. Co.
Squires Co., C. E.
Star-Martin Gage Co.
Summers Gyroscope
Swartwout Co.
Taylor Instr. Cos.
Tri-Tronics Co.
Trimount Instr. Co
U. S. Gauge Div.
Valv-Trol Co.
Wallace & Tiernan
Warrick Co.
Watts Reg. Co.
Westinghouse Electric
Weston Instrs.
Wheelco Instr. Div.
White-Rodgers Electric
Yarnall-Waring

BOLOMETER TUBES, see Radiation Pickups

BOLOMETERS, see Radiation Pickups

BOLTS, Special, Heat Treated

Aero Supply Mfg. Co.
Albany Prods. Co.
Allmetal Screw Products
Amer. Laubscher
Amer. Screw Co.
Anti-Corrosive Metal Prods.
Autoscrew Co.
Chicago Screw Co.
Conant Bros.
Continental Screw Co.
Federal Screw Prods.
Hartford Machine Screw
Karl, Inc.
Hubbell Metals
Natl. Automatic Prods.
Research Dev. Mfg.
Scovill Mfg.
Stafford Co.
Stronghold Screw Prods.
Torrington Co.
United Screw & Bolt
Wheaton Co.

BOLTS, Special, Stainless Steel

Aero Supply Mfg. Co.
Albany Prods. Co.
Amer. Laubscher
Amer. Screw Co.
Anti-Corrsive Metal Prods.
Automatic Methods, Inc.
Autoscrew Co.
Chicago Screw Co.

BAILEY BOILER METER

Steam Flow—Air Flow Ratio Meter

- This dependable and accurate guide to maximum combustion economy is easily understood and followed by operators. It indicates, records, and integrates Steam Flow from the boiler, records Air Flow supplied for combustion, and records Flue Gas Temperature.

Best combustion efficiency is secured by keeping the Steam Flow and Air Flow pens together so that the records coincide. The record of the Flue Gas Temperature when compared with that of Steam Flow shows the condition of baffles and tubes, and indicates heat absorption efficiency.

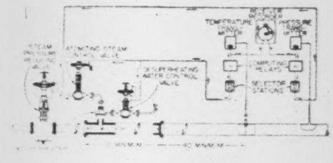
The **Bailey Boiler Meter** reduces fuel costs, lessens maintenance and outage, lowers standby costs, and adds capacity. It is suitable for boilers of 100 hp or more and for all types of fuels.

To obtain maximum benefit from the **Bailey Boiler Meter**, it should be made an integral part of a Bailey Combustion Control System so that combustion losses are automatically corrected as they tend to appear.

Request Product Specification M61-1.

BAILEY METER COMPANY
1041 IVANHOE ROAD · CLEVELAND, O.
Bailey Meter Company Ltd., Montreal, Canada

For more information circle **45** on inquiry card.



BAILEY DESUPERHEATING & PRESSURE REDUCING CONTROL

- The control system is air-operated and is arranged to automatically maintain the desired final steam temperature by controlling the quantity of the water fed to the Desuperheater.

Uses standard Bailey components for the measurement and control of both temperature and pressure. The temperature measurement is accomplished by using a closed, helium gas-filled system as illustrated or it may be electrically measured by using a Temperature Resistance Element.

The Desuperheating Water Control Valve and the Steam Pressure Reducing Valve are equipped with Bailey Positioning Relays.

Steam temperature and steam pressure are both recorded on the same 12 in. circular chart. Two additional records or two controllers may also be included in the same case if desired.

Request Product Specification M55-1

BAILEY METER COMPANY
1041 IVANHOE ROAD · CLEVELAND, O.
Bailey Meter Company Ltd., Montreal, Canada

For more information circle **46** on inquiry card.

Conant Bros
Continental Screw Co.
Federal Screw Prods.
Hartford Mach. Screw
Heitz, Karl, Inc.
Hubbell Metals
Natl. Automatic Prods.
Research Dev. Mfg.
Schnitzer Alloy Prods.
Star Stainless Screw Co.
Stronghold Screw Prods.
Swissomatic Products
Torrington Co.
United Screw & Bolt
Waltham Screw Co.
Woodruff & Stokes

BOMBS, High Pressure for Testing Bottom Hole Samples, Oil and Gas

Amer. Instr. Co.
Autoclave Engrs.
Coleman Instr. Co.
Greiner, Emil
High Pressure Equipt.
Hoke, Inc.
Koehler Instr. Co.
Labline, Inc.
Precision Scientific
Pressure Prods. Industries
Ruska Instr. Corp.
Vapor Recovery Systems

BOMBS, Hydrogenation, Lean Oil

Amer. Instr. Co.
Autoclave Engineers
Daniel Orifice Fitting
High Pressure Equipt. Co.
Parr Instr. Co.
Precision Scientific
Pressure Prods. Industries
Ruska Instr. Corp.

BOMBS, Micro Combustion

Autoclave Engineers
Fish-Schurman
High Pressure Equipt. Co.
Indust. Scientific
Microchemical Service
Parr Instr. Co.
Precision Scientific
Pressure Prods. Industries
Wilkens-Anderson Co.

BOMBS, Oxygen, Sodium Peroxide, Sulphur, etc.

Autoclave Engrs.
Central Scientific
Emerson App. Co.
Greiner, Emil
High Pressure Equipt.
Hill & Co.
Indust. Scientific, Inc.
Koehler Instr. Co.
Labline, Inc.
Parr Instr. Co.
Precision Scientific
Pressure Prods. Industries
Scott Co., Hermon Hosmer
Scott Testers, Inc.
Wall Colmonoy
Wilkens-Anderson Co.

BOMBS, Reid Vapor Pressure

Amer. Instr. Co.
Central Scientific
Daniel Orifice Fitting
Greiner, Emil
Hallikainen Instruments
Indust. Scientific
Koehler Instr. Co.
Labline, Inc.
Precision Scientific
Technical Equipt. Co.
Weston Electcl. Instr.
Wilkens-Anderson Co.

BOMBS, Specific Gravity, see Specific Gravity Bombs

BOMBS, Temperature, see Temperature Bombs

BORE INSPECTION INSTRUMENTS, see Telescopes, Bore, Inspection

BOTTLES, Cubic Foot, see Specific Gravity Bottles

BOTTLES, Specific Gravity, see Specific Gravity Bottles

BOTTLES, Weighting, see Weighing Bottles

BOURDON TUBES and COILS, see Tubing, Bourdon

BOW CIRCLES, see Drawing Instruments

BOXES, see Cabinets, also Panels

BOXES, Ayrton Shunt, see Shunts, Ayrton

BOXES, Ratio, see Resistance Ratio Boxes

BOXES, Resistance, see Resistance Boxes

BOXES, Thermostat, see Thermostats

BRIDGES
ELECTRICAL

- AC & DC
- CONDUCTIVITY
- IMPEDANCE
- KELVIN
- LIMIT
- WHEATSTONE
- AUTO-BRIDGE

Write for complete catalog

Industrial Instruments Engineering Corp.

Industrial Instruments Engineering Corp.
89 Commerce Road, Cedar Grove, Essex County, N. J.

For more information circle 47 on inquiry card.

BRAKE TESTING INSTRUMENTS

Amer. Instr. Co.
Askania-Werke A. G.
Bendix Aviation Corp.
Clough-Brengle
Commercial Research Div.
Cramer Controls Corp.
Emery Co.
Epic Inc.
Gilmore Industries
Triumph Mfg.
Wallace & Tiernan

BRAKES, Mechanical and Magnetic

American-Monarch
Bendix-Pacific
Cutler-Hammer
Digitronics Corp.
Electronic Mechanisms
GE, Apparatus Sales
GE, Specialty Contrls
Globe Industries
Internl. Resistance
Lear, Inc.
Reeves Instr. Corp.
Vickers, Inc.
Warner Elect. Brake

BREADBOARDS

Aerolite Electrs.
Alden Products
Beckman Div.
Curtiss-Wright
Datascan, Inc.
Davenport Mfg.
Dittmore & Freimuth
DuMont Labs., Allen B.
Engineered Electronics
Gap Instr. Corp.
Gen. Riveters, Inc.
Helipot Corp.
Lear, Inc.
Neutronics Research
PIC Design Corp.
Peschel Electronics
Precision Mechanisms
Radionics, Inc.
Servo Corp. of Amer.
Servomechanisms, Inc.
Sanders Associates
Stanley Aviation
Stearns Electric
Sterling Precision Corp.
Tri-Dex Electronics
Vector Electronic
Waldorf Instr. Co.
Western Gear Corp.

BREAKERS, Circuit, see Circuit Breakers

BRIDGES, Balancing and Calibrating, Manual (see also Potentiometers)

Allegany Instr. Co.
Amer. Helicopter Div.
B & F Instruments
B & H Instr. Co.
Barnes Dev. Co.
Boonton Radio
Bristol Co.
Cal-Ohm Labs.
Century Electronics & Insts.
Collins, G. L.
Consol. Electrodynamics
Datran Electronics
Daven Co.
Dynamic Research Co.
Edcliff Instruments
Electro Measurements, Inc.
General Communication
General Radio Co.
Gray Instrument Co.
Helland Div.
Industrial Electronics
Industrial Instrs.
Indust. Test Equipt. Co.
Internl. Resistance
Julie Res. Labs.
Kaiser Aircraft & Elect.
Leeds & Northrup
Magnetic Instr. Co.
Marconi Instruments
Minneapolis-Honeywell
  Indust. Div.
  Rubicon Instrs.
Model Engrg. & Mfg.
Owen Labs. Inc.
Phoenix Prec. Inst.
Physics Res. Labs.
Polyphase Instr.
Research Instr. Co.
Shallcross Mfg.
Simmonds Aerocessories
Southwestern Ind. Elec.
Special Instrs. Lab.
Task Corp
Tech Labs., Inc.
Waters Mfg.Co., Inc.
Winslow Co., Inc.

BRIDGES, Electrical, AC

Acton Labs.
Aerovox Corp.
Assoc. Research Inc.
Atlantic Research Corp.
Aviation Engrg. Co.
Baldwin-Lima-Hamilton
Boonton Radio
Bristol Co.
Brown Electro-Measurement
Brush Instruments
Cal-Ohm Labs.
Cal-Tronics Corp.
Cambridge Instr. Co.
Central Scientific
Chicago Indust. Instr.
Clough-Brengle
Consol. Electrodynamics
Daven Co.
Deltron, Inc.
Devtronics, Inc.
Dynamic Research
Electro Instr., Inc.
Electro Measurements, Inc.
Electronic Dev. Lab.
Electronic & Engrg. Serv.
Electronic Prods. Co.
El-Tronics Co.
Federal Telephone & Radio
Feller Engrg. Co.
Fielden Instr. Div.
Freed Transf. Co.
GE, Apparatus Sales
General Communication
General Radio
Gray Instr. Co.
Hickok Elec. Instr.
Indikon Co.
Industrial Insts., Inc.
Indust. Test Equipt. Co.
Kahn & Co.
Land-Air, Inc.
Leeds & Northrup
Magnetic Instr. Co.
Marconi Instruments
Minneapolis-Honeywell,
  Rubicon Instrs.
Muirhead Instrument
Phoenix Prec. Inst.
Physics Res. Labs.
Polytechnic Res. & Dev.
Radio City Products
Reiner Electronics
Rinco, Inc.
Shallcross Mfg.
Sherron Metallic
Southw. Indust. Electronics
Sweets Co., Martin
Technology Instr. Corp.
Thordarson-Meissner
Tobe Deutschmann
Topp Industries
Transformers, Inc.
United Optical
United Transf. Corp.

BRIDGES, Electrical, Capacitance

Acton Labs.
Aerovox Corp.
Assoc. Research Inc.
Aviation Engrg. Co.
Avien Inc.
Boonton Electronics
Boonton Radio
Bristol Co.
Brown Electro-Measurement
Brush Instruments
C.G.S. Labs.
Cal-Tronics Corp.
Cambridge Instr. Co.
Central Scientific
Chicago Indust. Instr. Co.
Clegg Labs.
Clippard Instr. Lab.
Clough-Brengle
Commun. Measmts. Lab.
Cornell-Dubilier
Deltron, Inc.
Electro Measurements, Inc.
Electronic Devel. Lab.
Electronic & Engrg. Serv.
Electronic Instr. Co.
Epic Inc.
Federal Telephone & Radio
Feller Engrg. Co.
Fielden Instr. Div.
Freed Transf. Co.
General Communication
GE
General Radio
Gray Instr. Co.
Gulton Industries
Hickok Elec. Instr.
Industrial Dev. Labs.
Indikon Co.
Industrial Control
Industrial Insts., Inc.
Indust. Test. Equipt. Co.
Jackson Electcl. Insts.
Jarco Services
Kahn & Co.
Kin Tel
Laboratory Equipt. Co.
Leeds & Northrup
MacLeod & Hanopol
Magnavox Co.
Magnetic Instr. Co.
Marconi Instruments
Measurements Corp.
Minneapolis-Honeywell,
  Rubicon Instrs.
Muirhead Instrument
RCA
Radio City Products
Rinco, Inc.
Scientific Specialties
Shallcross Mfg. Corp.
Sherron Metallic
Sierra Electronic
Simmonds Accessories
Simpson Electric
Shallcross Mfg.
Solar Mfg.
Southwestern Indust. Elect.
Sprague Electric
Sylvania Elect. Prods.
Sweets Co., Martin
Technology Instr. Corp.
Thordarson-Meissner
Tobe Deutschmann
Topp Industries
Triplett Electc.
Triumph Mfg.
United Optical

BRIDGES, Electrical, Conductivity

Aerovox Corp.
Assoc. Research Inc.
Boonton Radio
Bristol Co.
Cal-Ohm Labs.
Cal-Tronics Corp.
Cambridge Instr. Co.
Central Scientific
Clippard Instr. Lab.
Edin Electronics
Electro-Mec Lab.
Electro Measurements, Inc.
Electronic Prods. Co.
Federal Telephone & Radio
Feller Engrg. Co.
Fielden Instr. Div.
Fisher Research Lab.
Freed Transf. Co.
GE
General Radio
Gray Instr. Co.
Industrial Insts., Inc.
Julie Res. Labs.
Kahn & Co.
Klett Mfg.
Leeds & Northrup
Marconi Instruments
Magnetic Instr. Co.
Minneapolis-Honeywell,
  Rubicon Instrs.
Mira Scientific Instr.
Natl. Inst. Labs.
Sensitive Res. Instr.
Shallcross Mfg.
Sherron Metallic Corp.
Sorvall Inc.
Sweets Co., Martin
Thwing-Albert
Topp Industries
Thordarson-Meissner
United Optical

BRIDGES, Electrical, DC

Amer. Meas. & Contl.
Assoc. Research Inc.
Astra Tech. Instr.
Baldwin-Lima-Hamilton
Barber-Colman
Barnes Devel. Co.
B & H Instr. Co.
B & F Instr. Co.
Borden Engrg. Div.
Bristol Co.
Brown Electro-Measurement
Cal-Ohm Labs.
Cal-Tronics Corp.
Cambridge Instr. Co.
Chicago Indust. Instr.
Clegg Labs.
Clippard Instr. Lab.
Daven Co.
Devtronics, Inc.
Donner Scientific
Eastern Precision Resistor
Edin Electronics
Electro Instr., Inc.
Electro-Mec Lab.
Electro Measurements, Inc.
Electronic Devel. Lab.
El-Tronics, Inc.
Eppley Laboratory, Inc.
Federal Telephone & Radio
Feller Engrg. Co.
Fielden Instr. Div.
Fisher Scientific
Freed Transf. Co.
General Communication
General Radio
Gray Instr. Co.
Humphrey Inc.
Indust. Test Equipt. Co.
Industrial Electronics
Industrial Insts., Inc.
Julie Res. Labs.
Kahn & Co.
Leeds & Northrup
Magnetic Instr. Co.
Marconi Instruments
Measurements Corp.
Minneapolis-Honeywell,
  Rubicon Instrs.
Muirhead Instrument
Phoenix Prec. Inst.
Physics Research Labs.
Pimex, Inc.
Radio City Products
RCA
Reiner Electronics
Rinco, Inc.
Shallcross Mfg. Co.
Sherron Metallic Corp.
Sticht Co.
Sweets Co., Martin
Thordarson-Meissner
Thwing-Albert
Topp Industries
United Optical
Westinghouse Electric
Winslow Co.

BRIDGES, Electrical, Hoopes

Austin Co.
Freed Transf. Co.
Gray Instr. Co.
Leeds & Northrup
Magnetic Instr. Co.
Thordarson-Meissner

BRIDGES, Electrical, Impedance

Acton Labs.
Advance Electronics
Allied Prods. Div.
Atlantic Research
Boonton Radio
Bristol Co.
Brown Electro-Measurement
Brush Instruments
C.G.S. Labs.
Cal-Tronics Corp.
Chesapeake Instr. Corp.
Chicago Indust. Instr.
Clarke Instr. Corp.
Clegg Labs.
Clough-Brengle
Conant Labs.
Daven Co.
Deltron, Inc.
Electro Measurements, Inc.
Electronic Devel. Lab.
F. R. Machine Works
Federal Telephone & Radio
Feller Engrg. Co.
Fielden Instr. Div.
Freed Transf. Co
General Communication
GE
General Radio
Gray Instr. Co.
Hewlett-Packard
Hickok Elec. Instr.
Industrial Insts., Inc.
Indust. Test Equipt.
Kahn & Co.
Kin Tel
Leeds & Northrup
Magnetic Instr. Co.
Marconi Instruments
Meyer-Opticraft
Millivac Instruments
Muirhead Instrument
Radex Corp.
Radio City Products
RCA
Reliance Electronics
Reiner Electronics
Rinco, Inc.
Scientific Specialties
Scott, Inc., Hermon
Shallcross Mfg.
Sierra Electronic
Southwestern Indust.
Sweets Co., Martin
Technology Instr. Co
Thwing-Albert
Topp Industries
United Optical
Waters Mfg.
Winslow Co.

BRIDGES, Electrica Inductance

Acton Labs
Allied Prods. Div.
Assoc. Research Inc.
Berkeley Div.
Boonton Radio
Bristol Co
Brown Electro-Measurement
Brush Instruments
Cal-Tronics Corp.
Cambridge Instr. Co.
C.G.S. Labs.
Chicago Indust. Instr.
Clegg Labs.
Clough-Brengle
Daven Co
Electro Measurements, Inc.
Electronic Devel. Lab.
Electronic Instr. Co.
Federal Telephone & Radio
Feller Engrg. Co.
Fielden Instr. Div.
Freed Transf. Co.
GE
General Radio
Gray Instr. Co.
Hickok Elec. Instr.
Industrial Instr., Inc.
Indust. Test Equipt. Co.
Kahn & Co.
Kin Tel
Leeds & Northrup
Magnetic Instr. Co.
Marconi Instruments
Measurements Corp.
Minneapolis-Honeywell,
  Rubicon Instrs.
Muirhead Instrument
Pacific Instr. Co.
RCA
Raytheon Mfg.
Rinco, Inc.
Shallcross Mfg.
Sierra Electronic Corp.
Southw. Ind. Electronics
Sweets Co., Martin
Technology Instr., Corp.
Thordarson-Meissner
Topp Industries
Transformers, Inc.
Triumph Mfg.
United Optical
Waters Co.
Winslow Co.

BRIDGES, Electrical, Kelvin

Assoc. Research Inc.
Baldwin-Lima-Hamilton
Beck Bros.
Bristol Co.
Cal-Ohm Labs.
Cambridge Instr. Co.
Central Scientific
Eastern Precision Resistor
Electro Prods. Lab.
Electro-Tech Equip.
Eppley Laboratory
Feedback Controls
Feller Engrg. Co.
Freed Transf. Co.
GE, Apparatus Sales
Gray Instr. Co.
Industrial Insts., Inc.
Kahn & Co.
Leeds & Northrup
Minneapolis-Honeywell,
  Rubicon Instrs.
Physics Research Labs.
Pimex, Inc.
Rinco, Inc.
Shallcross Mfg.
Sticht Co
Thwing-Albert
Weston Instr.
Winslow Co.

BRIDGES, Electrical, Limit

ACF Electronics
Assoc. Research Inc.
Authorized Mfrs. Serv.
Automatic Electric
Barber-Colman
Barnes Chicago
Bristol Co
Cal-Tronics Corp.
Chicago Indust. Instr. Co.
Clippard Instr. Lab
Commun. Measmts. Lab.
Davenport Mfg. Co.
Donner Scientific
Eastern Precision Resistor
Electro Measurements, Inc.
Electro-Mec. Lab.
Electro-Tech Equip.

Electronic Devel. Lab.
El-Tronics, Inc.
Federal Telephone & Radio
Feiler Engrg. Co.
Fielden Instr. Div.
Freed Transf. Co.
General Radio
Gray Instr. Co.
Indikon Co
Industrial Insts., Inc.
Indust. Test Equipt. Co.
Julie Res. Labs
Leeds & Northrup
Magnetic Instr. Co.
Minneapolis-Honeywell, Rubicon Instrs.
Radio City Products
Reiner Electronics
Scott, Inc. Hermon Homer
Shallcross Mfg.
Sticht Co.
Sweets Co., Martin
Winslow Co

BRIDGES, Electrical, Power-Factor

Acton Labs.
Allied Prods. Div.
Boonton Radio
Cal-Tronics Corp.
Cambridge Inst. Co.
Clough-Brengle
Electronic Devel. Lab.
Electronic Instr. Co.
Epic Inc
Federal Telephone & Radio
GE
General Electronic
General Radio
Gray Instr. Co
Industrial Instruments
Indust. Test Equipt. Co.
Leeds & Northrup
Magnetic Instr. Co.
Marconi Instruments
Physics Research Labs.

BRIDGES, Electrical, Self-balancing, see Potentiometers

BRIDGES, Electrical, Strain Gage

Aero Electronics
Allegany Instr. Co.
Allied Prods. Div.
Amer. Helicopter Div.
B & F Instruments
Baldwin-Lima-Hamilton
Bristol Co.
Brush Instruments
Cal-Ohm Labs
Century Electronics & Insts.
Consol. Electrodynamics
DuMont Labs. Allen B.
Dynametrics Corp.
Dynamic Instr. Co.
Ellis Assocs.
Fielden Instr. Div.
Franklin Electronics
Furst Electronics
Gilmore Industries
Gray Instr. Co
Hathaway Instr. Co.
Helland Div.
Indikon Co
Industrial Electronics
Lessells & Assocs.
Magnetic Instr. Co
Minneapolis-Honeywell, Rubicon Instrs.
Owen Labs. Inc
Phoenix Prec. Inst.
RCA Div
Taller & Cooper
Task Corp
Thwing-Albert

BRIDGES, Electrical, Vacuum Tube

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Berkeley Div
Boonton Radio
Bristol Co
Central Scientific
Crown Ind. Prods.
Donner Scientific
Electro Prods. Lab.
Electronic Prods. Co.
Electronic & Engrg. Co.
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Feiler Engrg. Co
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Shallcross Mfg
Sylvania Elect. Prods.
Televiso Co
Thordarson-Meissner
Thwing-Albert
Triumph Mfg. Co.
Waters Mfg
Wilson & Co

BRIDGES, Electrical, Wattmeter

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Bruno-N. Y. Indust.
Brunswick Instruments
Clegg Labs
Computer Co. of Amer.
Electron Radar Prods.
Freed Transf. Co.
Hamilton Watch
Hycon Mfg. Co
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Magnetic Instr. Co
Simpson Electric
Sperry Gyroscope
United Optical
Weinschel Engrg. Co

BRIDGES, Electrical, Wheatstone

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B & H Instr. Co.
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Barnes Devel. Co.
Beck Bros.
Biddle Co., James G.
Borden Engrg. Div.
Bristol Co.
Brown Electro-Measurement
Brush Instruments
Cal-Ohm Labs.
Cal-Tronics Corp.
Cambridge Instr. Co.
Central Scientific
Chicago App. Co.
Commun. Measmts. Lab.
Consol. Res. Co.
Daven Co.
Deltron, Inc.
Dynamics Research
Eastern Precision Resistor
Electro Measurements, Inc.
Electro-Mec Lab.
Electro Prods. Lab.
Electro-Tech Equipt.
Electronic Devel. Lab.
Electronic Instr. Co.
Englehard, Inc., Chas.
Epic, Inc.
Eppley Laboratory
Federal Telephone & Radio
Feedback Controls
Feiler Engrg. Co.
Fielden Instr. Div.
Fisher Scientific
GE Apparatus Sales
General Radio
Gray Instr. Co.
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Industrial Electronics
Industrial Insts., Inc.
Indust. Test Equipt.
Julie Res. Labs.
Kahn & Co.
Laboratory Equip.
Land-Air, Inc.
Leeds & Northrup
Magnetic Instr. Co.
Marconi Instruments
Minneapolis-Honeywell, Rubicon Instrs.
Muirhead Instr.
Non-Linear Systems
Physics Research Labs.
Pimex, Inc.
RCA
Reiner Electronics
Reliance Instr. Mfg. Corp.
Rinco, Inc.
Roller-Smith
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Servonics, Inc.
Shallcross Mfg.
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Welch Mfg. Co., W. M.
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BRINELL MACHINES, see Hardness Testing Machines, Brinell

BRUSHES, Carbon, Graphite, Metal, etc.

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Carbon Div
Electro Devel. Co.
Electro Miniatures Corp.
Electro-Tech Equip.
GE
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Linde Co.
Mallory & Co., P. R.
Mill-Rose Co.
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Morganite, Inc.
National Carbon Co.
Ohio Carbon Co.
Osborn Electric
Poly-Scientific Corp.
Sittler Corp.
Slip Ring Co. of Amer.
Speer Carbon Co.
Stackpole Carbon Co.
Westinghouse Electric
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B. T. U. INDICATORS

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Bristol Co.
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Cutler-Hammer
Engelhard, Inc. Chas.
Hays Corp.
Hagan Chem. & Controls
Penn Insts. Div.
Precision Scientific

BUBBLERS, see Sight Flow Bubblers

BULBS, Rubber

Acushnet Process Co.
Armstrong Cork
Goodrich Co., B. F.
Indust. Scientific
U. S. Rubber

BULBS, Thermometer

Arnoux Corp.
Astra Tech. & Inst. Corp.
Autron Engrg., Inc.
Barber-Colman
Bristol Co.
Cal-Ohm Labs.
Cardinal Instrumentation
Edison Inc. Thomas A.
Eisele & Co.
Fischer & Porter Co.
Fish-Schurman
Foxboro Co.
GE Apparatus Sales
Greiner, Emil
Hallikainen Instruments
Illinois Testing Labs.
Kimble Glass Co.
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Manostat Corp
Minneapolis-Honeywell
Moeller Instr. Co.
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Powers Regulator Co.
Ruge Assocs.
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Thwing-Albert Instr.
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BURETTES

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Bacharach Indust. Instr.
Bellco Glass, Inc.
Burrell Corp.
Central Scientific
Corning Glass Works
Eitzen Co., Louis C.
Fischer & Porter Co.
Fish-Schurman
Fisher Scientific
Friedrich & Dimmock
Greiner, Emil
Greiner Glassblowing Lab.
Griebel Co., E.
Hays Corp.
Kahl Scientific Instr.
Indust. Scientific, Inc.
Kimble Glass
Kontes Glass
Laboratory Equipt. Corp.
Macalaster Bicknell
Manostat Corp
Microchemical Service
Micro-Metric Inst.
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Olsen Testing Mach.
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Thwing-Albert
U. S. Testing Co.
Warren Bros. Mfg.
Whittington Pump

BUSHINGS, Fused Silica, see Silica, Fused

BUSHINGS, Hermetically Sealed

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Farnsworth Electronics
Fish-Schurman
Fusite Corp.
Garde Mfg. Co.
Genl. Ceramics & Steatite
Genl. Hermatic Sealing
Hermaseal Co.
Ohio Carbon Co.
Richfield Coined Products
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Steatite Div.
Stupakoff Div.
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Torwico Electronics
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Acme Scientific
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Mica Insulator
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Sealtron Co.
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Steward Mfg. Co., W. D.
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BUSHING, Sapphire Filament Coiling

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Gatti, Aurele M.
Imetra Co. Ltd.
Industrial Jewel Bearing
Jones Optical
Karp Metal Prods.
Lignum-Vitae
Powers, George
Steel Co., Herman H.
Swiss Amer. Jewel Bear.
Swiss Jewel Co.
Worley Jewel Co.

CABIN PRESSURE CONTROLS, Aircraft, see Aircraft Instruments

CABINETS, Instruments (see also Cases)

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Alden Products
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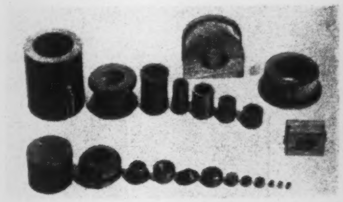

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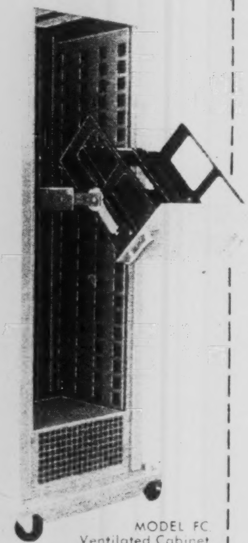

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Thermo Nuclear Wire Ind.
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Dage Electric
Dale Products
Danbury-Knudsen
Daven Co
Daystrom Instr. Div.
Defiance Engrg. & Micro
Diamond Mfg.
Dittmore-Freimuth
DuMont Labs., Allen B.
Eagle Signal Corp
Eastern Prec. Resistor
Eastern Specialty Co
Edin Co.
Empire State Labs.
Engineered Electronics
Engrg. & Research Corp
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Felt Corp.
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West. Des. & Mfg. Corp
Westronics, Inc.
Wheeler Electronic Corp.
Whitney Blake
Winslow Co., Inc.
Zenith Optical

CABLE, Coaxial

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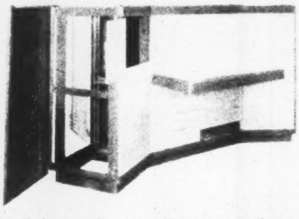

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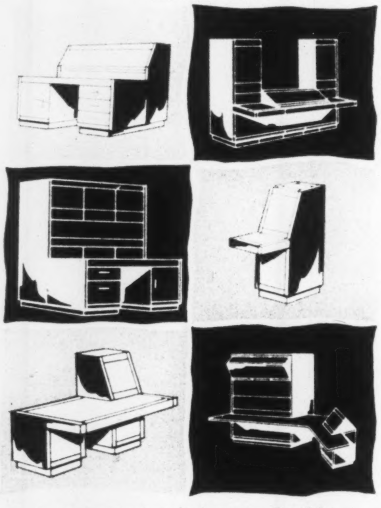

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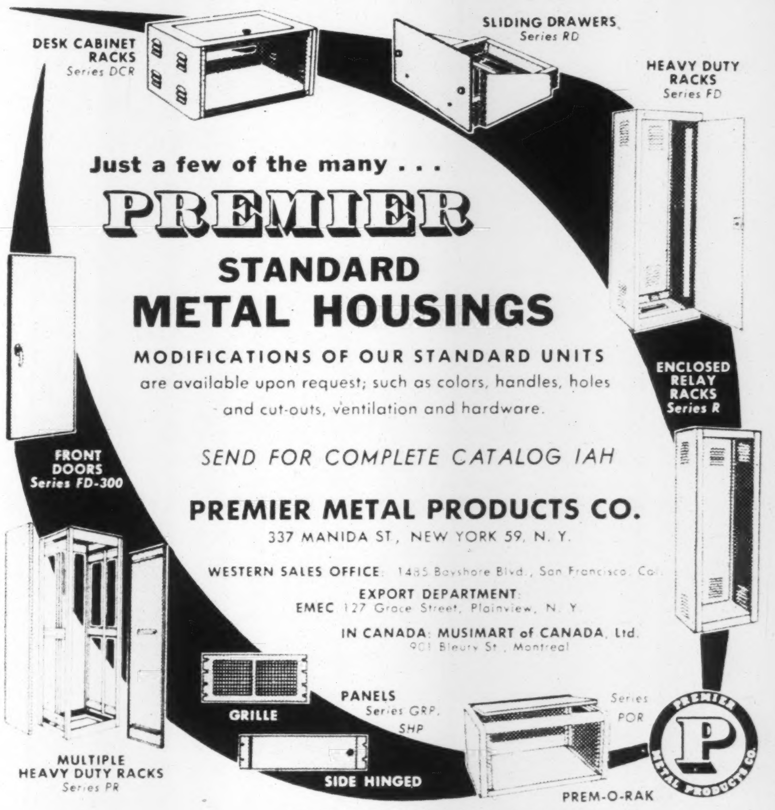

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British Industries Corporation
Port Washington, New York

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Gen. Ceramics & Steatite
GE
General Radio
HiTemp Wires, Inc
Instruments Inc.
Intelex Systems
Johnson Co., E. F.
Kistler Instr. Co
Lewis Engrg. Co
Microdot, Inc
Newark Electric Co
Okonite Co
Pacific Auto. Prods
Phalo Plastics Corp
Precision Made Prods
Precision Tube Co.
Progress Electronics
Preis Engrg. Mach.
Prodelin, Inc.
Pyro-Electric
Revere Corp.
Rex Corp.
Rockbestos Prods. Corp
Roeblings Sons
Sequoia Process Co.
Surprenant Mfg
Tensolite Insul. Wire Co
Thermax Wire Corp
Thermo Nuclear Wire
Uniform Tubes
Warren Wire Co.
Whitney Blake Co.

CABLE, Flexible, Control

Airtron, Inc.
Amer. Chain & Cable
Anaconda Wire & Cable
Arens Controls
Barbour Stockwell
Belden Mfg. Co
Boston Insul. Wire
Brand & Co
Chester Cable
Collyer Indust. Wire
Conduflex Corp.
Continental Wire
Crescent Insul. Wire
Engrg. & Res. Corp.
Essex Wire Corp.
Farnsworth Electronics
GE Const. Materials Div.
Hall Scott
Lewis Engrg. Co.
Lenz Elect. & Mfg.
Microdot, Inc.
Okonite Co.
Rex Corp.
Rockbestos Prods. Corp
Rome Cable Corp.
Sanders Associates
Sequoia Wire Div.
Stewart Mfg.
Stretch Wire
Teleflex, Inc.
Tensolite Insul. Wire Co.
Thermo Nuclear Wire
White Indust. Div., S. S.

CABLE CODING LABELS, see Labels and Tags

CABLE CONNECTORS, see Connectors

CABLE SUPPORTS, see Tubing Supports

CABLE TESTERS

Aircraft Electronics
Amer. Mach. & Foundry
Amer. Metrix Corp
Amer. Res. Corp.
Ampco Mfg. Co.
Amthor Testing
Ann Arbor Instr. Works
Assoc. Research, Inc
Baldwin-Lima-Hamilton
Berkshire Labs.
Beta Electric
Boonton Radio
Borden Engrg. Div.
Boulin Instr. Corp.
Bristol Engrg. Corp.
Calif. Tech. Indust.
Cal-Tronics Corp.
Chatillon & Sons
Clegg Labs., Inc.
Commun. Measmts. Lab.
Davenport Mfg. Co.
Dillon & Co
Dit-Mco, Inc.
Emery Co.
Engrg. & Res. Corp.
Feller Engrg. Co.
Fruengel Inc.
GE
General Radio Co
Gilmore Industries
Gray Instr. Co.
Hacker & Co.
Helipot Div.
Hewson Co
Instrument Labs.
Kahn & Co.
Kaiser Aircraft & Elect.
Kellogg Switchboard
Krouse Testing Mach.
Kuss Industries
Leeds & Northrup
Link Aviation
Manson Labs.
Metrol Inc
Mine Safety Appliances
Multi-Amp Corp.
Nankervis Co.
Nelson Instr. Co.
Olsen Testing Machine
Pacific Scientific
Perkins & Son
Peschel Electronics
Precise Measmts. Co.
Radio Frequency Labs.
Riehle Div.
Scott Testers
Shallcross Mfg.
Sherron Metallic Corp.
Slaughter Co.
Std. Elect. Time Co.
Std. Electronic Res.
Steel City Testing Mach.
Tarc Electronics
Technical Insts. Co.
Testing Machines, Inc.
Thordarson-Meissner
Thwing-Albert
Transistor Devices
Transval Engrg. Corp.
United Mfg
Virginia Electronics
Westronics, Inc.

CALIBRATING EQUIPMENT for Electrical Instruments, see Electrical Instrument Calibrators

CALIBRATING EQUIPMENT for Testing Machines, see Testing Machine Calibrators, also Proving Rings

CALIBRATION CHAMBERS, see Environmental Test Chambers

CALIBRATORS, Flowmeter

Aero Elec. (Chicago)
Bendix, Pioneer-Central
Brooks Rotameter Co
Computer-Measmts. Corp
Electro-Pulse, Inc.
Fischer & Porter
Gilmore Industries
Greiner Co., Emil
Manostat Corp.
Nankervis Co
Natl. Inst. Labs.
Nurnberg Thermometer
Orban Co., Kurt
Potter Aeronaut. Corp.
Potter Instr. Co
Schaevitz Engrg.
Waugh Engrg. Co.

CALIBRATORS, Pressure, see Pressure Instrument Calibrators, Deadweight

CALIPER RULES

Amer. Meas. Insts.
Brown & Sharpe
Dixon, Inc.
DoAll Co.
Lufkin Rule Co
Millers Falls Co.
Scherr Co.
Sheffield Corp.
Starrett Co.
Weber Co.
Zeiss, Inc., Carl

CALIPERS, see Dimensional Gages

CALORIMETERS, Adiabatic, Coal and Fuel

Bowen & Co.
Central Scientific Co.
Dixon, Inc.
Emerson App. Co
Ever Ready Thermometer
Fisher Scientific
Greiner, Emil
Indust. Scientific
Parr Instr. Co.
Precision Scientific
Prec. Thermom. & Insts.
Welch Mfg. Co., W. M.
Wilkens-Anderson

CALORIMETERS, Gas

Amer. Meter Co.
Beckman Instrs.
Central Scientific
Connelly, Inc.
Cosa Corp.
Cutler-Hammer
Ever Ready Thermometer
Hays Corp.
Indust. Scientific
Labline, Inc
Palmer Thermometer, Inc.
Precision Scientific
Prec. Thermom. & Insts.
Refinery Supply Co.
Sierra Electronic
Welch Mfg. Co., W. M.
Wilkens-Anderson

CALORIMETERS, Miscellaneous, including Peroxide Bomb, Photo-electric, Steam, etc.

Amer. Electronic Labs
Beckman Instrs
Central Scientific
Chemalloy Electronics
Ellison Draft Gage
Ever Ready Thermometer
Fisher Scientific
Greiner, Emil
Indust. Scientific
Natl. Appliance Co.
Parr Instr. Co.
Polytechnic Res. & Devel
Res. Appliance Co.
WacLine, Inc
Wilkens-Anderson

CALORIMETERS, Oxygen Bomb

Central Scientific
Emerson App. Co.
Ever Ready Thermometer
Fisher Scientific
Greiner, Emil
Indust. Scientific
Parr Instr. Co.
Refinery Supply Co.
Wilkens-Anderson

CAMERA SHUTTER TESTERS

Berkeley Div.
Chatillon & Sons
Chicago Aerial Industs.
Dynapar Corp
Eric Instrumentation
G. M. Mfg
Gordon Enterprises
Potter Instr. Co.
Hycon Mfg. Co.
I-L-S Instr. Co.
Shepard Labs
Sunshine Scientific
Systron Corp
Taller & Cooper
Triumph Mfg.

CAMERAS, Aerial

Abrams Corp.
Amer. Instr. Co.
Amer. Optical Co.
Bell & Howell
Bronoptics Co.
Chicago Aerial Industs.
Daco Instrument
Farrand Optical
Fairchild Camera & Instr.
Fecker, Inc.
Flight Res., Inc.
Gordon Enterprises
Hulcher Co.
Hycon Electronics
Inst. Corp. of Fla.
Hycon Mfg.
Jack Scient. Instr. Co., Bli
Librascope, Inc.
Mauer, Inc.
Norden-Ketay
Opplem Co., Inc.
Pacific Labs.
Perkin-Elmer
Specialties, Inc.
Sterling Prec. Instr. Corp.
Taller & Cooper
Testa Mfg. Co
Topp Industries
Unertl Optical
Vectron, Inc.
Vought Co
Wild Heerbrugg
Wollensak Optical

CAMERAS, Microfilm

Abrams Instr. Corp
Amer. Optical
Bell & Howell
Eastman Kodak
Ercona Corp.
Geotechnical Corp
Gordon Enterprises
Graflex Corp
Heitz, Inc., Karl
Lynn, Robert M.
Mauer, Inc.
Microstat Corp.
Nikon, Inc.
Pacific Labs.
Photographic Products, Inc
Praktica Co
Remington Rand
Vectron, Inc.
Williamson Devel. Co.
Zeiss Inc., Carl

CAMERAS, Oscilloscope Recording

Abrams Instr. Corp.
Allegany Instr. Co.
Amer. Instr. Co.
Beattie-Colman, Inc.
Berkshire Labs.
Berndt-Bach
Browning Labs.
Cambridge Instr. Co.
Chicago Aerial Industs.
Coleman Instr. Co.
DuMont Labs., Allen B.
Edgerton, Germeshausen
Electro-Medical Lab.
Electronic Tube Corp.
Fairchild Camera & Instr.
Flight Res., Inc.
General Radio
Geotechnical Corp
Gordon Enterprises
Grass Instr. Co.
Helland Div.
Heitz, Inc., Karl
Houston-Fearless Corp.
Hycon Mfg
Jack Scient. Instr. Co., BID
Kearfott (Western)
Mauer, Inc.
Midwestern Instruments
Nikon, Inc.
Norden-Ketay Corp.
Pace Engrg. Co.
Pacific Labs.
Perkin-Elmer Corp.
Photographic Products, Inc.
Praktica Co
Richardson Camera Co.
Rutico, Inc.
Seismograph Service Corp.
Southw. Ind. Electronics
Taller & Cooper
Texas Instrs. Inc.
Traid Corp.
Unertl Optical
Warrick Co.
Vought Co.
Wollensak Optical
Zoomar Corp.

CAMERAS, Scientific, including Back Reflection

Abrams Instr. Corp.
Bausch & Lomb
Beattie-Coleman
Beckman & Whitley
Bell & Howell Co.
Brinkmann Instruments
Bronoptics Co.
Brubaker, Inc.
Cambridge Instr. Co.
Chicago Aerial Industs.
Coleman Instr. & Mfg.
Curtiss Labs. Inc.

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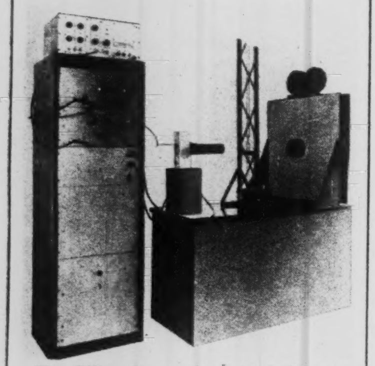

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Fecker, Inc.
Flett Lab.
Flight Research Inc.
G M Mfg.
Gadgets, Inc.
GE, X Ray
General Radio
Geotechnical Corp.
Gordon Enterprises
Graflex Corp.
Hayes Scientific App.
Helland Div.
Heitz, Inc., Karl
Henson Co.
Hulcher Co.
Hycon Mfg. Co.
Jack Scient. Instr. Co., Bill
Jarrell-Ash
Laboratory Optical
Lafayette Instr. Co.
Leitz, Inc.
Librascope, Inc.
Mauer, Inc.
North Amer. Philips
Opplem Co.
Panero Mirrors
Perkin-Elmer
Phoenix Prec. Inst.
Picker X Ray
Praktica Co.
Process & Instruments
Richardson Camera Co.
Rutico Inc.
Schneider-Cogswell
Scient. Inst. Dev. Lab.
Stoelting Co.
Taller & Cooper
Telecomputing Corp.
Topp Industries
Traid Corp.
Unertl Optical Co.
Victor Laboratory
Vought Co.
Warrick Co.
Zeiss Inc., Carl
Zoomar Corp.

CAMERAS, Scientific, Diffraction, see X-Ray Cameras, Diffraction

CAMERAS, Scientific, Motion Picture, Including High Speed

Askania-Werke A. G.
Abrams Instrument
Barnes Devel. Co.
Beckman & Whitley
Bell & Howell
Beiock Instr.
Benson-Lehner Corp.
Berndt-Bach
Bronoptics Co.
Brubaker, Inc.
Eastman Kodak
Ercona Corp.
Fairchild Camera & Instr.
Farrand Optical
Fecker, Inc., J. W.
Flight Res. Inc.
Fruengel Inc.
General Radio
Gerator Corp.
Gordon Enterprises
Henson Co.
Houston-Fearless
Inst. Corp. of Fla.
Jack Scient. Instr. Co., Bill
Lafayette Instr. Co.
Librascope, Inc.
Mauer, Inc.
Mitchell Camera Corp.
Opplem Co., Inc.
Panero Mirrors
Perkin-Elmer
Praktica Co.
Process & Instruments
Richardson Camera Co.
Scherr Co.
Taller & Cooper, Inc.
Torp Industries
Traid Corp.
Vectron, Inc.
Vought Co.
Warrick Co.
Wollensak Optical
Zeiss, Inc., Carl
Zoomar Corp.

CAMERAS, Scientific, Photo Micro, see Microscopes, Metallographic

CAMERAS, Television, see Television, Industrial

CAPACITANCE INDICATORS

ACF Electronics
Allied Radio Corp.
Aerovox Corp.
Assoc. Research Inc.
Ballantine Labs.
Barnes Devel. Co.
Biddle Co., Jas. G.
Boonton Radio
Bradshaw Instruments
Bristol Co.
Brown Electro-Measurement
Brush Instruments
Cambridge Instr. Co.
Chicago Indust. Instr.
Clippard Instr. Lab.
Clough-Brengle
Cornell-Dubilier
Daystrom Instr. Div.
Decker Corp.
Deltron, Inc.
Electro-Measurements
Electronic Devel. Lab.
Electronic Instr. Co.
Erdco Engrg. Co.
Federal Telephone & Radio
Feller Engrg. Co.
Fielden Instr. Div.
Fox Valley Instr.
Foxboro Co.
GE, Apparatus Sales
General Radio
Hickok Electcl. Instr.
Hygrotester Inc.
Indikon Co.
Industrial Control Co.
Industrial Instr. Corp.
Industrial Test Equipt.
Instr. Associates
Instruments, Inc.
Instrument Labs.
Jackson Electcl. Instr.
Jarco Services
Kahn & Co.
Kay Electric
Kin Tel
Keithley Instrs., Inc.
Kellogg Switchboard
Leeds & Northrup
Liquidometer Corp.
MacLeod & Hanopol
Marconi Instruments
Minneapolis-Honeywell,
  Boston Div.
  Rubicon Instrs.
New Haven Clock
Oil Well Water Loc. Co.
Opad Electric
Panoramic Radio
Phaostron Co.
Physics Research Labs.
Potter Co.
Premier Crystal Labs.
Premier Research
Pyramid Electric
Radio City Products
RCA
Reiner Electronics
Rimco, Inc.
Robertshaw-Fulton
Sargent & Co.
Schauer Mfg. Co.
Shallcross Mfg.
Sherron Metallic Corp.
Sickles Div.
Sierra Electronic
Simmonds Aerocessories
Solar Mfg.
Sprague Electric
Sun Electric
Sylvania Elect. Prods.
Tobe Deutschmann
Triplett Electcl. Instr.
Westburg Mfg. Co.
Weston Electcl. Instr.
Williams App. Co.
Wilson & Co.
Yellow Springs Instr.

CAPACITANCE STANDARDS, see Standards, Capacitance

CAPACITOR FILMS

Aerovox Corp.
Aircraft-Marine Prods.
Balco Research Labs.
Chicago Condenser
Dearborn Electronic Labs.
Electronic Fabricators
Emerson & Cuming
GE
Potter Co.
San Fernando Electric

CAPACITORS, Air

Bud Radio
Cambridge Instr. Co.
Cardwell Mfg.
Chicago Condenser Corp.
Condenser Prods. Co.
Corning Glass Works
Dittmore & Freimuth
Erie Resistor
GE, Apparatus Sales
General Instr. Co.
General Radio
Hammarlund Mfg.
JFD Mfg. Co.
Johanson Mfg. Corp.
Johnson Co., E. F.
Leeds & Northrup
Millen Mfg. Co.
Muirhead Instrument
National Co.
New Haven Clock
Newark Electric Co.
North Amer. Philips
Sarkes Tarzian Inc.
Sickles Div.
U. S. Gasket Co.
WacLine, Inc.
Wilmar Mfg.

CAPACITORS, Ceramic

Aerovox Corp.
AiResearch Mfg. Co.
Allen-Bradley
Amer. Condenser Co.
Amer. Lava Corp.
Arnhold Ceramics
Astron Corp.
Cambridge Thermionic
Capcon Corp.
Centralab Div.
Cornell Dubilier
Dilectron Div.
Electra Mfg. Co.
Erie Resistor
Fast & Co.
Filtron Co., Inc.
GE Spec. Electronic
Good-All Electric Mfg.
Gudeman Co.
Gulton Industries
Hi-Q Div.
Insuline Corp. of Amer.
Maida Development
Mallory & Co., P. R.
Mucon Corp.
Newark Electric Co.
Potter Co.
Speer Carbon
Sprague Electric
Stupakoff Div.
Welwyn Internat.

CAPACITORS, Electrolytic

Aerovox Corp.
Amer. Condenser Co.
Astron Corp.
Capcon, Corp.
Chicago Condenser
Cornell-Dubilier
DuMont-Airplane
Fansteel Metallurgical
GE, Apparatus Sales
Good-All Electric Mfg.
Gudeman Co.
Industrial Condenser Corp.
Kellogg Switchboard
Magnavox Co.
Mallory & Co., P. R.
Micamold Electronics
National Co., Inc.
New Haven Clock
Newark Electric Co.
Ohmite Mfg.
Planet Mfg.
Pyramid Electric
Sangamo Electric
Solar Mfg.
Sprague Electric
Tobe Deutschmann
Walker-Jamieson

CAPACITORS, Fixed Composition.

Aerovox Corp.
Airborne Accessories Corp.
AiResearch Mfg. Co.
Balco Res. Labs.
Carbon Div.
Centralab Div.
Chicago Condenser
Cornell-Dubilier
Corning Glass Works
Dearborn Electronic Labs.
DuMont-Airplane
Erie Resistor
Fed. Telephone & Radio
GE, Apparatus Sales
Gudeman Co.
Hansen Electronics.
Hopkins Engrg. Co.
Industrial Condenser Corp.
LR Electronics
Lear, Inc.
Leeds & Northrup
Mallory & Co., P. R.
Mucon Corp.
Potter Co.
Pyramid Electric
San Fernando Elec. Mfg.
Sangamo Electric
Stackpole Carbon
Tobe Deutschmann Corp.

CAPACITORS, Gas Filled

Epic Inc.
GE
Johnson Co., E. F.
Lapp Insulator

CAPACITORS, High Voltage

AMP, Inc.
Aerovox Corp.
Amer. Condenser Co.
Amperex Electronic
Arnhold Ceramics
Axel Brothers
Balco Research Labs.
Capcon Corp.
Centralab Div.
Chicago Condenser Corp.
Condenser Products
Cornell-Dubilier
Corning Glass Works
Corson Electric Mfg. Corp.
Dearborn Electronic Labs.
Electra Mfg. Co.
Epic Inc.
Erie Resistor
Fast & Co.
Filtron Co., Inc.
GE, Apparatus Sales
Good-All Electric Mfg.
Gudeman Co.
Hi-Q Div.
Hopkins Engrg.
Industrial Condenser Corp.
Jennings Radio Mfg.
Johnson Co., E. F.
LR Electronics
Lapp Insulator
Mallory & Co., P. R.
Micamold Electronics
National Co.
New Haven Clock
Plastic Capacitors, Inc.
Potter Co.
Pyramid Electric
San Fernando Elec. Mfg.
Sangamo Electric
Southern Electronics
Speer Carbon Co.
Sprague Electric
Texas Insts., Inc.
Tobe Deutschmann Corp.
U. S. Electr. Dev. Corp.
Westinghouse Electric

CAPACITORS, Metallized Paper

Aerovox Corp.
Airborne Access. Corp.
Amer. Condenser Co.
Astron Corp.
Capcon Corp.
Chicago Condenser
Cornell-Dubilier
Dearborn Electronic Labs.
Filtron Co., Inc.
Good-All Electric Mfg.
Gudeman Co.
Hopkins Engrg. Co.
Industrial Condenser Corp.
Intelex Systems
Mallory & Co., P. R.
New York Coil Co.
Newark Electric Co.
Potter Co.
Pyramid Electric
San Fernando Electric
Sprague Electric
Tobe Deutschmann
U. S. Electr. Devel. Corp.

CAPACITORS, Mica

Aerovox Corp.
American Condenser Co.
Arnhold Ceramics
Cambridge Instr. Co.
Capcon Corp.
Centralab Div.
Chicago Condenser
Continental-Diamond Fibre
Cornell-Dubilier Elect.
Crystal Research Labs.
Electronic Fabricator
Erie Resistor
GE, Apparatus Sales
General Radio
Industrial Insts., Inc.
Kellogg Switchboard
Lectronic Res. Labs.
Leeds & Northrup
Mallory & Co., P. R.
Measurements Corp.
Micamold Electronics
Muirhead Instrument
National Co., Inc.
Newark Electric Co.
New Haven Clock
RCA
Rubicon Co.
Sangamo Electric
Sickles Co.
Solar Mfg.
Sprague Electric
United Condenser
Winslow Co.

CAPACITORS, Paper

Aerovox Corp.
Amer. Condenser Co.
Arnhold Ceramics
Astron Corp.
Automatic Electric
Axel Brothers
Capcon Corp.
Chicago Condenser Corp.
Condenser Products
Cornell-Dubilier
Corson Electric Mfg.
Dearborn Electronic Labs.
DuMont-Airplane
Electrical Utilities
Fast & Co.
Film Capacitors, Inc.
Filtron Co., Inc.
GE, Apparatus Sales
General Radio Co.
Good-All Electric Mfg.
Gudeman Co.
Hopkins Engrg. Co.
Industrial Condenser Corp.
Kellogg Switchboard
Lectronic Res. Labs.
Lenkurt Electric
Mallory & Co., P. R.
Micamold Electronics
Muirhead Instrument
National Co., Inc.
New Haven Clock
New York Coil Co.
Newark Electric Co.
PCA Electronics
Plastic Capacitors, Inc.
Potter Co.
Pyramid Electric
San Fernando Elect. Mfg.
Sangamo Electric
Solar Mfg.
Sprague Electric
Stromberg-Carlson
Tennant Sons & Co.
Texas Insts., Inc.
Tobe Deutschmann
U. S. Electr. Dev. Corp.

CAPACITORS, Plastic Dielectric

Aerovox Corp.
Airborne Access. Corp.
Amer. Condenser Corp.
Astron Corp.
Axel Brothers
Balco Research Labs.
Chicago Condenser Corp.
Condenser Prods. Co.
Continental-Diamond Fibre
Cornell-Dubilier
Corson Electric Mfg.
Dearborn Electronic Labs.
DuMont-Airplane
Electronic Fabricators
Erie Resistor
Fast & Co.
Filtron Co., Inc.
GE, Apparatus Sales
General Radio Co.
Good-All Electric Mfg.
Gudeman Co.
Hopkins Engrg. Co.
Industrial Condenser Corp.
Lectronic Res. Labs.
Mallory & Co., P. R.
Micamold Electronics
New Haven Clock
New York Coil Co.
Newark Electric Co.
Pimex, Inc.
Plastic Capacitors, Inc.
Potter Co.
Pyramid Electric
Radiation Res. Corp.
San Fernando Electric
Sanders Assocs.
Sangamo Electric
Southern Electronics
Sprague Electric
Stackpole Carbon Co.
Texas Insts., Inc.
Tobe Deutschmann
U. S. Electr. Dev.
U. S. Gasket Co.
U. S. Instr. Corp.

CAPACITORS, Precision (0.01%)

AiResearch Mfg. Co.
Capeon Corp
Chicago Condenser Corp.
Condenser Products
Cornell-Dubilier
Corson Electric Mfg
Dearborn Electronic Labs.
DuMont-Airplane
Electro-Measurements
Federal Telephone & Radio
General Radio Co.
Gudeman Co
Hammarlund Mfg.
Industrial Condenser Corp
JFD Mfg.
Johanson Mfg.
Leeds & Northrup
New Haven Clock
Potter Co
Radiation Research
Research Instr. Co.
Sangamo Electric
Southern Electronics
Tobe Deutschmann Corp
U. S. Electr. Dev. Corp

CAPACITORS, Tantalum

Aerovox Corp
Cornell-Dubilier
DuMont-Airplane
Fansteel Metallurgical
Fed'l Telephone & Radio
GE, Apparatus Sales
Intelex Systems
Mallory & Co., P. R.
Micamold Elects. Mfg
Ohmite Mfg.
Process Electronics
Sprague Electric
Transistor Electronics
Texas Instrs., Inc.

CAPACITORS, Trimmer Piston

Cambridge Thermionic
Corning Glass Works
JFD Electronics

CAPACITORS, Vacuum

Amperex Electronics
Ralco Research Labs
Eitel-McCullough
GE
Grain Lab. Equipt.
Industrial Condenser Corp
Jennings Radio Mfg.
Lear, Inc
Leeds & Northrup
Ling Electronics
National Co
United Electronics Co

CAPACITORS, Variable

Aerovox Corp
Aircraft Radio
Anatran Engrg. Corp
Arnhold Ceramics
Bud Radio
Cambridge Instr. Co
Cambridge Thermionic
Cardwell Mfg. Corp
Centralab Div
Clarke Instr. Corp
Clippard Instr. Lab
Condenser Products
Corning Glass Works
Crystal Research Labs
Dittmore & Freimuth
Eitel-McCullough
Endevco Corp
Erie Resistor
Federal Telephone & Radio
GE, Apparatus Sales
General Radio
Hammarlund Mfg.
Harvey Radio Labs.
JFD Mfg
Jennings Radio Mfg
Johanson Mfg
Johnson Co., E. F
Kellogg Switchboard
Lapp Insulator
Leeds & Northrup
Mallory & Co., P. R
Mat'ox Electronics
Measurements Corp
Millen Mfg. Co.
National Co., Inc
New Haven Clock
Newark Electric Co
Oak Mfg. Co
Radio Condenser Co
Rubicon Co
Sarkes Tarzian Inc
Southern Elects. Corp
Sprague Electric
United Condenser
Wilmar Mfg

CAPACITORS, Vitreous Enamel

Cornell-Dubilier
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CAPACITY METERS, see Capacitance Indicators

CARBON DIOXIDE METERS, see Gas Analyzers

CARBON MONOXIDE METERS, see Gas Analyzers

CARBON PILES, see Resistors, Carbon Compression

CASES, Instrument, Metal

Abalon Prec. Mfg.
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Brooks & Perkins
Bud Radio
Bushnell Optical
Blickman, Inc., S.
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Bristol Co.
Chicago Indust. Instr.
Churchill Lighting
Clark Co
Cleveland Wire Spring
Cooper Co., Clark
Craig Systems
Croname, Inc
Dittmore & Freimuth
DuBois Engrg. & Mfg.
DuMont Labs., Allen
Eitzen Co., Louis C.
Electric Tachom. Corp.
Electro Chemical Engrg.
Ellis & Sons, George P.
Engrg. & Res. Corp.
Engis Equipt. Co
Esterline-Angus
Falstrom Co.
Fischer & Porter Co.
Gadgets, Inc
Garder Lab
Gold Seal Mfg
Grain Lab. Equipt
Grammes & Sons
Hathaway Instr. Co
Hunter Spring Co
Instruments Inc
Johnson Co., E. F
Karp Metal Prods
Keller Products
Kirk & Blum
Koehler Instr. Co
Lewyt Corp
Marine Compass Co
Metal Craft Co
Molded Insulation Co.
Moss & Co
Newark Electric Co
Par-Metal Prods
Phaostron Co
Pneumafil Corp
Rapidan Mfg. Co
Reiner Electronics
Riester & Thesmacher
Scovill Mfg
Shallcross Mfg
Simpson Electric
Suffolk Products
T. A. Mfg. Co
Taylor Instr. Cos.
Tech. Material Corp
Teletronics Labs., Inc
Trerice Co., H. O
Warwick Products
Weber Bros. Metl. Wks.
Wolfe & Mann
Zero Mfg.

CASES, Instrument, Molded including Rubber

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Amer. Kloeckner-Moeller
Auburn Button Wks.
Bendix, Eclipse-Pioneer
Boonton Molding Co.
Breeze Corporations
Chicago Indust. Insts.
Chicago Mld. Prod
Consoli. Molded Prods.
Continental-Diamond Fibre
Dynakon Corp.
Eby, Inc., Hugh H
Erie Resistor
Felsenthal & Sons
Fischer & Porter
Gadgets, Inc.
GE
General Industries Co.
General Tire
Graton & Knight Co.
Grigoleit Co.
Imperial Molded Prods.
Koch & Sons
Kollsman Instr. Div.
Luzerne Rubber
Milsco Products
Molded Insulation Co.
Phaostron Co.
Regal Plastic Co.
Richardson Co.
Rogan Bros.
Rohm & Haas
Scheidl Mfg. Co.
Stokes Rubber
Taylor Instr. Cos.
Valley-National
Walden Electronics
Waterbury Cos.
Watertown Mfg.
Westinghouse Electric

CASES, Instrument, Wood (see also Cabinets)

Allied Engraving
Alteneder & Sons
Bal Corp., William
Brit. Electronic Sales
Bushnell Optical
Daven Co.
Dittmore & Freimuth
Eitzen Co., Louis C.
Engis Equipt. Co.
Gadgets, Inc.
Gordon Enterprises
Grain Lab. Equip.
Gurley, W. & L. E.
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Koehler Instr. Co.
Laboratory Furniture Co.
Lab. of Electronic Engrg.
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Phaostron Co.
Rueckert Mfg.
Scientific Wood Cab. Co.
Sierra Electronic
Statolet Corp.
Taylor Instr. Cos.
Vidon Custom Cases
Waldon Electronics
Warwick Products
Wolff Woodcraft Corp.

CASES, Leather

Alteneder & Sons
Apex Specialties Co.
Auburn Mfg. Co
Bal Corp., William
Bausch & Lomb
Bushnell Co., D. P.
Chicago Indust. Insts
Daniels, Inc
Garlynn Engrg. Co
Gordon Enterprises
Graton & Knight
Hugo Bosca Co
Kellogg Switchboard
Magnecord Inc.
Milsco Mfg.
Moss & Co.
Rueckert Mfg
Simpson Electric
Statolet Corp.
Warwick Products

CASES, Weatherproof

Adalet Mfg
Bal Corp., William
Blossom Mfg.
Bristol Co.
Craig Systems
Daniels, Inc
Dittmore & Freimuth
Falstrom Co.
Graton & Knight
Instruments, Inc
Karp Metal Prods. Co.
Kirk & Blum
Koch & Sons
Kuss Industries
Metal Craft Co
Rapidan Mfg. Co
Regal Plastic Co
Reiner Electronics
Riester & Thesmacher
Swanson Engrg. Co.
Tailer & Cooper, Inc
Tech. Material Corp.
Warwick Products
Watertown Mfg
Zero Mfg.

CASING, Flexible

Arens Controls Inc
Barbour Stockwell
Bel-Art Products
Breeze Corporations
Chicago Metal Hose
Flexonics Corp
Fulton Sylphon Div.
Penna. Flex. Metallic
Schehl Mfg. Co.
Stewart Corp.
Stow Mfg.
Universal Metal Hose
White Dental Mfg.

CATHETOMETERS

Askania Werke, A. G.
Cambridge Instr. Co
Central Scientific
Dietert Co.
Eberbach Corp
Eberbach & Sons
Engis Equipt. Co
Ferner Co
Gaertner Scientific
Henson Co.
Indust. Scientific
Insco Company
Jarrell-Ash
National Instr. Labs.
Unertl Optical Co.
Victory Engrg. Co
Welch Mfg. Co., W. M
Wild Heerbrugg

CATHODE RAY TUBES, see Tubes, Cathode Ray

CELLS, Conductivity, see Conductivity Cells

CELLS, Heat Sensing, see Conductivity Cells, Thermal

CELLS, Kerr, see Kerr Cells

CELLS, Load, Tension, Compression, see Load Cells

CELLS, Photoelectric, see Photoelectric Cells

CELLS, Standard, see Standard Cells

CEMENT APPARATUS, see Concrete and Cement Test

CEMENT, Optical

Amer. Optical
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Bausch & Lomb
Benjamin & Assoc., L.
Biggs Co
Carbide & Carbon
Eastman Kodak
Edna Lite Optical
Emerson & Cuming, Inc.
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Durite Plastics
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Falls Industries
General Cement Mfg.
Goodrich Co., B. F.
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Humboldt Mfg.
Indust. Scientific
Olsen Testing Machine
Pacific Scientific
Precision Scientific
Soiltest, Inc.
Standard Concrete App.

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Central Scientific
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General Cement Mfg.
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Fisher Scientific
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Greiner, Emil
Griner Co., A. J.
Haines Designed Prods.
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Fairbanks, Morse & Co.
Hacker & Co.
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Olsen Testing Machine
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Sierra Engrg. Co.

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CHANGERS, Voltage, see Voltage Changers

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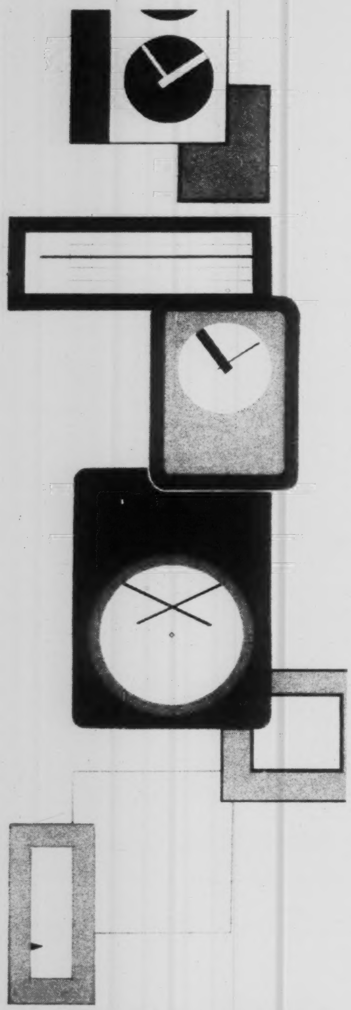

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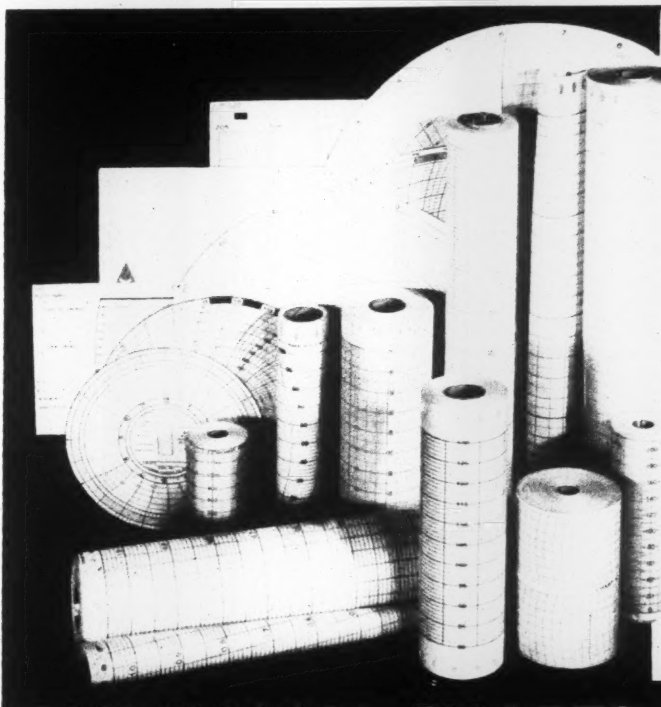

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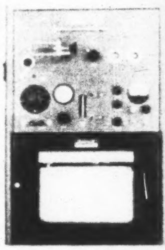

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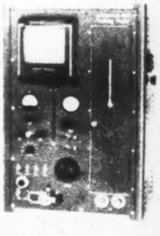

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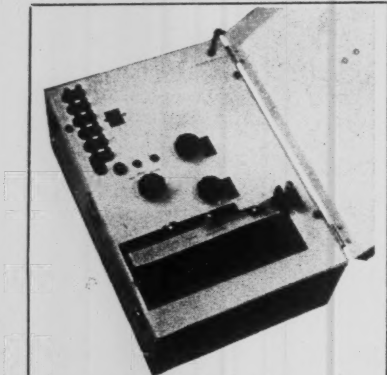

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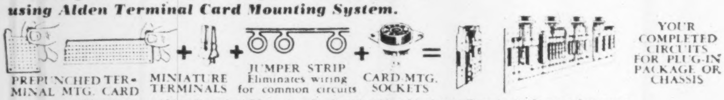
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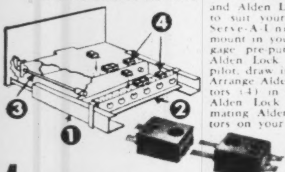

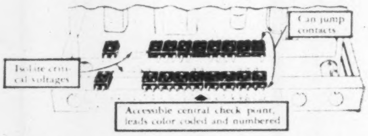
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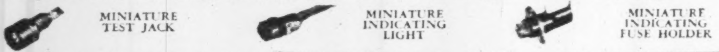
4. *Assign to each unit ALDEN SENSING ELEMENTS — to spot trouble instantly:*



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Wheelco Div.
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Amer. Instr. Co.
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Gaertner Scientific
GE
Gorrell & Gorrell
Hamilton Watch
Hathaway Instr. Co.

When Using This Guide look under the variable, e.g., Pressure Gages (not Gages, Pressure); or look under the noun—Magnets, Permanent (not Permanent Magnets).

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Potter Instr. Co.
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Wakemann Watch Co.

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Kahn & Co., Inc.
Opad Electric
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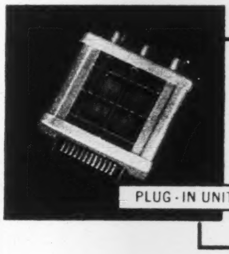

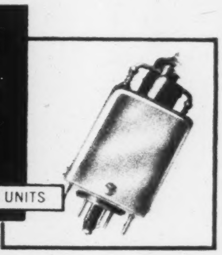

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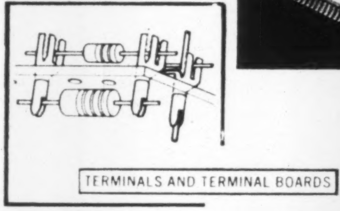

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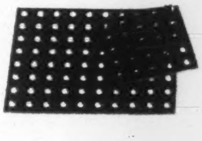

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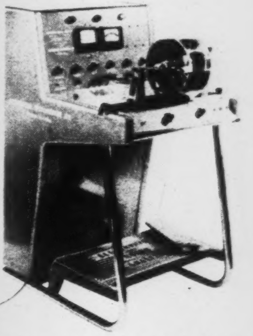

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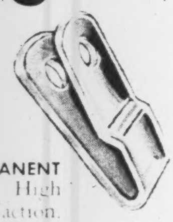

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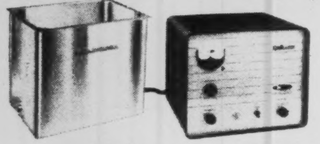

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625 MAIN STREET, WESTBURY, L. I., N. Y.
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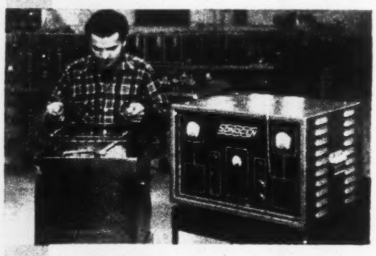

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Warren-Knight

CLINOMETERS, Geologists

Donner Scientific
Garlynn Engrg. Co.
Jarrell-Ash
Keuffel & Esser
Stratex Instr. Co.

CLINOMETERS, Ship

Eastern Specialty Co.
Engis Equipt. Co.
G. M. Mfg. Co
Geier & Bluhm
Hand & Sons
Instruments Corp.
Marine Compass Co.

Moeller Instr. Co.
Negus, T. S. & J. D.
Prec. Thermom. & Insts.
Rahm Instr. Inc.
Serdex, Inc.

CLIPS, Battery (see also Connectors)

Aerolite Electronics
Associated Spring Corp
Cambridge Thermionic
Eastern Specialty Co.
Elect. Auto-Lite
Federal Screw Prods.
Goldak Co
Grammes & Sons, Inc.
Kellogg Switchboard
Mueller Electric
National Tel-Tronics
Newark Electric Co.
Rodale Mfg.
Smith, Inc., Herman, H.
States Co.
Stimpson Co.

CLIPS, Fahnestock

Birnbach Radio
Clarostat Mfg.
Federal Screw Prods. Co
Grammes & Sons
Newark Electric Co.
Rodale Mfg.
Smith, Inc., Herman H.
Stimpson Co.

CLIPS, Fuse, Grid, Test

Aerolite Electronics
Alden Products
Associated Spring Corp.
Atlas E-E Corp.
Birnbach Radio
Eastern Specialty Co.
Federal Screw Prods.
Grayhill, Inc.
Kulka Electric
Martindale Electric
Millen Mfg. Co.
Miller Mfg.
Mueller Electric
National Co.
Natl. Tel-Tronics
Rapid Specialties Co.
Raytheon Mfg.
Richco Plastic
Smith, Inc. Herman H.

CLOCK PARTS

Alina Corp.
Allied Prods. Div.
Amer. Laubscher
Associated Spring Corp.
Bayside Watch Tool Co.
Chicago Thrift Etching
Cincinnati Time Rec. Co.
Croname, Inc.
Dollin Corp.
Elgin Natl. Watch
Erie Resistor
Edwards Co. Inc.
Gallien, R. P.
Grammes & Sons
Gries Reproducer Corp.
Hairspring Vibrating
Hartford Mach. Screw Co.
Howard Clock
Instrument Parts Corp.
Internat. Business Machs.
Jadow Inc., B.
Jessup Engrg. & Devel.
Johnson Eng. Co., W. V.
Leich Electric
Manross & Sons
Marshall Co.
Marsco Mfg.
Merkle-Korff Gear Co.
Modern Techn. Supp.
National Time & Signal
New Haven Clock
Newark Electric Co.
Photo Chemical Prods.
Precision Mfg. Co.
Precision Prods. Co.
Preco Co.
Research Dev. Mfg.
Rueckert Mfg.
Scovill Mfg.
Seth Thomas Clocks
Spaulding Fibre Co.
Specialty Screw Mach.
Sphinx American
Std. Automation Prods.
Std. Elect. Time Co.
Steel Co., Herman D.
Stimpson Co.
Swiss Amer. Jewel-Bear
Swiss Jewel Co.
Swissomatic Products
Tech. Oil Tool Corp.
Thompson Clock
Tinnerman Products
Tork Clock
Torrington Co.
Vallorbs Jewel
Waltham Screw Co.
Wakmann Watch Co.
Waples, W. S.
Waterbury Co's
Wilder, Inc.
Winn, Inc.

CLOCKS, Master or Primary

Alina Corp.
Allied Products Div.
Bendix, Eclipse-Pioneer
Chrono-Log Corp.
Cincinnati Time Rec. Co.
Edwards Co., Inc.
El Products Corp.
Elgin National Watch
Gaertner Scientific
GE Clock & Timer Dept.
General Radio
Geotechnical Corp.
Internat. Business Machs.
Jessup Engrg. & Dev. Co
Landis & Gyr
National Time & Signal
New Haven Clock
Parabam, Inc.
Parsons Co.
Phipps & Bird
Research Controls
Simplex Time Rec. Co.
Std. Elect. Time Co.
Stromberg Time Corp.
Thomas Clock
Wakmann Watch Co.
Wallace & Tiernan
Wickes Engrg. & Const.

CLOCKS, Minute Impulse and Synchronous

Alina Corp.
Amglo Corp.
Betts & Betts
Bristol Co.
Chrono-Log Corp.
Cincinnati Clock
Cincinnati Time Rec. Co.
Cramer Controls Corp.
Edwards Co., Inc.
Elect. Tachom. Corp.
Electyme Motor Prods.
Elgin Natl. Watch
GE, Apparatus Sales
GE Clock & Timer Dept.
General Controls
Geotechnical Corp.
Hansen Co.
Haydon Co., A. W.
Haydon Mfg. Co.
Internat. Business Machs.
Lafayette Instr. Co.
Landis & Gyr.
Lumenite Electronic
National Time & Signal
New Haven Clock
Phipps & Bird
Scientific Industries
Sessions Clock
Simplex Time Rec. Co.
Std. Elect. Time Co.
Stoelting Co.
Stromberg Time Corp.
Sunshine Scientific
Thomas Clock
Thompson Clock
Tork Clock
Westinghouse Electric

CLOCKS, Program, see Timers, Automatic Process, also Program Controllers

CLOCKS, Secondary

Alina Corp.
Allied Prods. Div.
Automatic Electric
Bristol Co.
Chrono-Log Corp.
Cincinnati Time Rec. Co.
GE Clock & Timer Dept.
Elgin Natl. Watch
Edwards Co., Inc.
Internat. Business Machs.
Landis & Gyr.
National Time & Signal
New Haven Clock
Simplex Time Rec.
Std. Elect. Time Co.
Stromberg Time Corp.
Systron Corp.
Thomas Clock
Wakmann Watch Co.
Wallace & Tiernan

CLOCKS, Standard

Alina Corp.
Aristo Import Co.
Chrono-Log Corp.
Cincinnati Clock
Cincinnati Time Rec. Co.
Edwards Co., Inc.
Foxboro Co.
Gaertner Scientific
GE Clock & Timer Dept.
General Radio
Geotechnical Corp.
Hansen Co.
Haydon Mfg. Co.
Internat. Business Machs.
Jaeger Watch

DIGITAL CLOCK
DIGITAL COUNT
DOWN SYSTEMS
DATA LOGGING | PROGRAMMING

By providing non-ambiguous contact closures at fixed intervals throughout the day the Parabam digital clock is ideal for use as a program controller or as a time source for recording time of day or elapsed time. The clock is also designed for use as a master time source in digital count down systems:

- "Easy to read" in-line single plane lamp bank.
- Individual decade reset pushbuttons.
- Removable lamp bank assembly.
- Contact output for recording.
- 24 and 12-hour models with one minute, second or tenth minute resolution.

PARABAM, INC.

110 Lomita Street El Segundo, California

For more information circle 70 on inquiry card.

Kollsman Instr. Corp.
Natl. Time & Signal
Negus, T. S. & J. D.
New Haven Clock
Research Controls
Rockwell Register Corp.
Seth Thomas Clock
Simplex Time Rec. Co.
Std. Elect. Time Co.
Stromberg Time Corp.
Swanson Engrg. Co.
Tork Clock
Wakmann Watch Co.

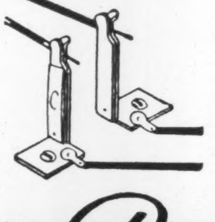
CLOCKS, Stop

Allied Prods. Div.
Atomlab, Inc.
Burke & James
Central Scientific
Clebar Watch
Controls Corp.
Cramer Controls Corp.
Dimco-Gray
Edwards Co., Inc.
Electrosig Corp.
Electro-Tech Equip.
Elgin Natl. Watch
Fish-Schurman
GE Clock & Timer Dept
Glogau & Co.
Greiner, Emil
Haydon Co., A. W.
Jaeger Watch
Jardur Import Co.
Lafayette Instr. Co.
National Time & Signal
Negus, T. S. & J. D.
New Haven Clock
Phila. Scientific Glass
Precision Scientific
Sessions Clock
Simplex Time Recorder
Std. Elect. Time Co.
Sticht Co., Herman H.
Stoelting Co.
Thompson Clock
Wakmann Watch Co.
Welch Mfg. Co., W. M.
Weston Electcl. Instr.

CLOCKWORKS, Electric, including Instrument Drives

Advanced Products Co.
Alina Corp.
Amglo Corp.
Bristol Co.
Bristol Motor Div.
Cincinnati Time Recdr.
Cramer Controls Corp.
Duplex Clock
Edin Co.
Edison, Thomas A.
Edwards Co., Inc.
Electric Tachom. Corp.
El Prods. Corp.
Elsbert Mfg.
Esterline-Angus
Fairchild Camera
GE Clock & Timer Dept.
Gorrell & Gorrell
Hagen Mfg.
Hamilton Watch Co.
Hansen Mfg.
Hathaway & Associates
Haydon Co., A. W.
Haydon Mfg. Co.
Holtzer-Cabot
Howard Clock

Rapid TEST CLIPS

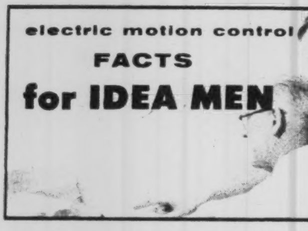


for MOTORS, COILS, ELECTRICAL UNITS
• Positive Connection • Long Life
For Any Size Lead, Solid or Braided Wire.
Tension Spring for Quick, Easy Setting.
40 amp. Polished Brass • Angle or Straight
Write for literature

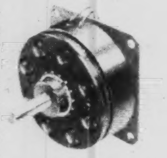
Rapid SPECIALTIES COMPANY
327 W. HURON ST., CHICAGO 10, ILLINOIS

For more information circle 69 on inquiry card.

When Using This Guide look under the variable, e.g., Pressure Gages (not Gages, Pressure); or look under the noun—Magnets, Permanent (not Permanent Magnets).



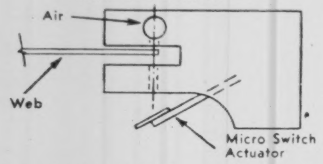
Air Scanners Control Clutches to Make Paper Web "Track"



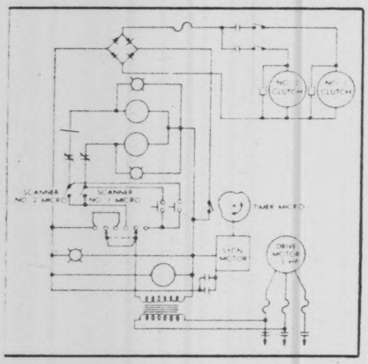
Here's an idea for controlling a feed-through operation automatically and preventing material on rollers from "walking" out of alignment.

Two Warner SF-400 stationary-field electric clutch-couplings operate in opposite directions to drive a tilting bar which makes the running web of a printing press drift left or right depending on the direction of tilt. When the roller tilts, the web creeps to the high side. Control is simple and automatic. Compressed air is aimed at micro switches at either side of the web. The web blocks the air stream to both micro switches during normal operation. But, if the web shifts off center, it uncovers one of the micro switches, which in turn is actuated by the air blast. The switch energizes the electric clutch, engaging the drive to bring the web back into line.

VIEW OF SCANNER



Electrical Schematic



Want more IDEAS? Whether your problem is speed control, indexing, fast cycling, synchronizing, or tension control, Warner can send you factual case histories showing results you can expect from *electric motion control*. Write today!

Industrial Products Division,
Warner Electric Brake & Clutch Co.,
Beloit, Wisconsin

WARNER **ELECTRIC BRAKES AND CLUTCHES**

For more information circle **71** on inquiry card.

Illinois Coil Spring
Induction Motors Corp.
Ingersoll-Waterbury
Insco Company
Instrument Gear Works
Internat. Business Machs.
Johnson Engrg. Co
Kurman Electronics
Landis & Gyr
Leich Electric
Merkle Korff
Miller-Harris Inst. Co
Modern Technical Supp.
Montgomery Mfg. Co
Natl. Time & Signal
New Haven Clock
Phipps & Bird
Sangamo Electric
Seth Thomas Clocks
Std. Elect. Time Co.
Swissomatic Products
Thompson Clock
Tork Clock
Trerice Co., H. O.
Vocaline Co. of Amer.

CLOCKWORKS, Mechanical including Instrument Drives

Alina Corp.
Allied Prods. Div.
Bayside Watch Tool Co.
Bodine Electric
Borel & Co.
Breeze Corporations
Bristol Co.
Bristol Motor Div.
Cramer Controls Corp.
Daco Instrument
Duplex Clock
Edin Corp.
El Prods. Corp.
Electric Tachom. Corp.
Elgin Natl. Watch
Esterline-Angus
Ford Instr. Co.
Gorrell & Gorrell
Hamilton Watch Co.
Haydon Mfg.
Howard Clock
Hunter Spring Co.
Ingersoll-Waterbury
Insco Company
Instr. Gear Works
Instru-Lec Corp.
Instruments Corp.
Internat. Business Machs.
Janette Mfg.
Johnson Engrg. Co.
Kollsman Instr. Div.
[illegible]
Merkle Korff Gear Co.
New Haven Clock
Plumb Co
Precision Products, Inc
Preco Co
Raymond Labs., Inc.
Research Devel. Mfg.
Rockwell Mfg.
Sangamo Electric
Seth Thomas Clocks
Smith Mach. Co.
Std. Elect. Time Co.
Steel Co., Herman D.
Stow Mfg. Co.
Swissomatic Products
Tech. Oil Tool Corp.
Thompson Clock
Trerice Co., H. O.
Wakmann Watch Co.
Wilder Inc.

CLOCKWORKS, Pneumatic, including Instrument Drives

Alina Corp.
Bodine Electric
Breeze Corporations
Bristol Co.
Cramer Controls Corp.
Dahl Co., Inc., G. W.
Edin Corp.
Electric Tachom. Corp.
Esterline Angus
Ford Instr. Co.
Haydon Mfg.
Hunter Spring Co.
Instr. Gear Works
Janette Mfg.
Johnson Engrg. Co.
Kollsman Instr. Div.
Merkle-Korff Gear Co.
Rockwell Mfg. Co.
Stow Mfg.
Thompson Clock
Wilder Inc.

CLOSURES, PRESSURE, see Seals, Mechanical

CLOTH, Wire

Cambridge Wire Cloth
Boston Insul. Wire
Chase Brass & Copper
Jelliff Mfg. Co.
Metal Textile Corp.
Roebling's Sons

CLOUD AND POUR TEST APPARATUS

Ace Glass Inc.
Amer. Instr. Co.
Amer. Research
Apex Scient.
Bellco Glass Corp.
Blue M Electric
Bowser Techn. Refr. Div.
Central Scientific
Corning Glass Works
Environmental Equipt. Co.
Fisher Scientific
Greiner Co., Emil
Humboldt Mfg. Co.
Koehler Instr. Co.
Kontes Glass
Labline, Inc.
Moeller Instr. Co.
New Haven Clock
Precision Scientific
Refinery Supply Co.

Refrigeration Systems, Inc.
Scientific Instr. Co.
Scientific Instr. Dev. Labs.
Scientific Glass App.
Technical Equipt. Co.
Temp. Engrg. Corp.
Tenny Engrg. Co.
Weston Electcl. Instr.
Wilkens-Anderson

CLUTCHES, Mechanical, Magnetic

Electronic Mechanisms
Gen. Riveters, Inc.
Technology Instrs. Corp.
Warner Elect. Brake

COAL TEST INSTRUMENTS and APPARATUS

Amer. Instr. Co.
Bailey Meter Co.
Brabender Instrs., Inc.
Burrell Corp.
Central Scientific
Cuthbert Co.
Elematic Equipt. Corp.
Emerson App. Co.
Fish-Schurman
Fisher Scientific
G. M. Mfg. Co.
Greiner, Emil
Hetherington & Berner
Laboratory Equipt. Corp.
Nuclear Research
Parr Instr. Co.
Precision Scientific
Radio City Prods.
Riehle Div.
Sargent & Co.
Sturtevant Mill
Technical Equipt. Co.
Testing Machines, Inc.

COATINGS, Synthetic Resin

Acme Wire Co.
Bakelite Div.
Biggs Co.
Carbide & Carbon
Chicago Thrift Etching
Dolph, John C., Co.
Dow Chemical
Dow Corning
DuPont
Durez Plastics & Chem.
Durite Plastics
Eastern Prec. Resistor
Electro-Tech Products
Emerson & Cuming
General Plastics
Goodrich Co., B. F.
Insulation Mfrs.
Lawter Chemicals
Mica Insulator
Micro-Circuits
Minnesota Mining & Mfg.
Monsanto Chemical
Moore & Co., Samuel
Moore Corp., John B.
Pancro Mirrors, Inc.
Penfield Mfg. Co.
Polymer Corp.
Pyramid Plastics
Sherwin-Williams
Silicones Div.
Stanley Works
Sullivan Varnish
United Chromium
U. S. Rubber
Werner Co., R. D.
Zophar Mills

COCKS, Glass

Corning Glass Works
Defender Instr. & Reg.
Fischer & Porter Co.
Fish-Schurman
Glasscraft Co.
Kimble Glass Co
Nester Co.
Owens-Illinois
Phoenix Prec. Instr.
Porter, George K.
Prec. Glass Prods.
Smith Co., Arthur F.

COCKS, Metal

Accessory Prods. Corp.
Conant Bros. Co.
Continental-Diamond Fibre
Dole Valve Co.
Hays Mfg. Co.
Hubbell Metals
Jerguson Gage
Parker Appliance Co.
Precision Scientific
Stafford Co.
Steel Co., Herman D.
Trerice Co.
Vacuum Electronics Engrg.
Weatherhead Co.
Weksler Thermom. Corp.
Westinghouse Air Brake Co.

CODE DISCS

Airflyte Electronics
Bendix, Pacific
Bushnell Co.
Carroll Co., J. B.
Datex Corp.
Instrument Dev. Labs.
Librascope, Inc.
Texas Instruments
Wang Labs., Inc.
Whitehead & Hoag Co.
Zenith Optical Lab.

CODING EQUIPMENT, see Telegraphy

COHESION TESTING MACHINES, Silk and Rayon, see Silk and Rayon Test Instruments

COIL FORMS, Ceramic and/or Plastic

Alden Products
Amer. Lava
Amer. Phenolic Corp.
Amphenol Electronics
Caddell-Burns
Cambridge Thermionic
Centralab Div.
Collectron Corp.
Continental-Diamond Fibre
Corning Glass Works
Crane Packing Co.
Eastern Prec. Resistor
Electronic Mechanics, Inc.
Ford Instr. Co.
Formica Co.
Garde Mfg.
General Ceramics
GE
General Transf. Co.
General Winding Co.
Grayhill, Inc.
Gries Reproducer Corp.
Insulation Mfrs. Corp.
Johnson Co., E. F.
Kearfott Co., Inc.
LR Electronics
Lamtex Industries
Micalex Corp. of Amer.
Millen Mfg. Co.
Molded Insulation Co.
Molex Products
Mycalex Corp. of Amer.
National Co.
Newark Electric Co.
North Hills Electric
Osborne Electric Co.
Polymer Corp.
Prec. Paper Tube Co.
Printloid, Inc.
Rex Corp.
Richardson Co.
Rogan Bros.
Saxonburg Ceramics
Shallcross Mfg.
Spaulding Fibre Co.
Speer Carbon Co.
Stackpole Carbon Co.
Steatite Div.
Steward Mfg. Co.
Stone Paper Tube Co.
Stupakoff Div.
Superex Electronics
Superior Steatite
Synthane Corp.
Telex, Inc.
Thermo Materials, Inc.
Thordarson-Meissner
U. S. Gasket Co
U. S. Stoneware Co
United States Electronics
Viking Electric
Waterbury Co's
Waters Mfg. Co., Inc
Watertown Mfg.

COIL TESTING EQUIPMENT

Assoc. Research Inc.
B & K Mfg.
Biddle Co., James
Boonton Radio Co.
California Magnetic
Chicago Indust. Instr.
Clippard Instr. Lab.
Clough-Brengle
Columbia Technical Corp.
Daystrom Instrument
Diatron Co.
Eastern Prec. Resistor
Electronic Instr. Co.
Fed. Telephone & Radio
Feiler Engrg. Co.
Freed Transf. Co.
GE, Apparatus Sales
General Electronic
General Radio
Ideal Industries
Industrial Insts., Inc.
Indust. Test Equipt.
Instrument Labs.
Kahn & Co.
Kay Electric
Kellogg Switchboard
Leeds & Northrup
Magnetic Instr. Co.
Martindale Electric
Minneapolis-Honeywell, Rubicon Instrs.
North Hills Elect. Co.
Pacific Instr. Co.
Panoramic Radio Co.
Radex Corp.
Radio City Products
Reiner Electronics
Schauer Mfg.
Seco Mfg. Co.
Shallcross Mfg. Co.
Sherron Metallic Corp.
Sun Electric
Sunshine Scientific
Technology Instr. Div.
Thordarson-Meissner
United Optical
United Transf. Corp.

COIL WINDING MACHINES, see Machines, Coil Winding

COILS RF and IF

Aerolite Electronics
Aerovox Corp.
Airpax Products
All-Tronics, Inc.
Atlas Engrg. Co
Avion Div.
Boonton Radio
Bud Radio
Caddell-Burns
Calif. Magnetic Cont. Corp.
Cambridge Thermionic
Carad Corp.
Carol Electronics
Coil Winding Equip.
Clippard Instr. Lab.
Corning Glass Works

Dietz Design & Mfg.
Dittmore & Freimuth
DuMont Labs., Inc., Allen
Eastern Prec. Resistor
Essex Electronics
Filtron Co., Inc.
General Instr. Co
Gordos Corp.
Goslin Electric
Gramer Transformer
Gudeman Co.
Hallicrafters Co.
Hansen Electronics
Houlihan Co
Internl. Resistance
Johnson Co., E. F.
LR Electronics
Magnavox Co.
Magnetic Instr. Co.
Mallory & Co., P. R.
Microtran Co.
Millen Mfg. Co.
Munston Mfg. & Service
National Co
Natl Aircraft Corp.
Newark Electric Co.
North Hills Electric
Ohmite Mfg. Co.
Osborne Electric
P & H Electronic
Pax Electronics
Polyphase Instr. Co.
Ratigan Electronics
Raypar, Inc.
Sealectric Switch & Relay
Sickles Div.
Speer Carbon Co.
Spellman Television
Superex Electronics
Sylvania Electric Prods.
Tech. Material Corp.
Tri-Dex Electronics
United States Electronics
Virginia Electronics
Waters Mfg.
Western Coil Prod.
Wheeler Electronic Corp.
Wirt Co

COILS, Toroidal

Acme Electric Corp
Acromag, Inc.
Aerovox Corp.
Aerolite Electronics
Airpax Products
AiResearch Mfg. Co
Alden Products
Amer. Meas. & Contl
Arnold Magnetics Co.
Atlantic Transf. Div.
Atlas Engrg. Co.
Avion Div.
Basler Electric
Brit. Electronic Sales
Burnell & Co.
Caledonia Electronics
Calmag Div.
Carad Corp.
Cedar Engrg., Inc.
Chicago Standard Trans.
Colin Campbell Co.
Collins, Corp., G. L.
Communication Access. Co.
Control Components Co.
D & R Limited
Dietz Design & Mfg.
Dittmore-Freimuth
DuMont Labs., Allen B.
Dynamics Res. Assoc.
Epsco, Inc.
Ford Instrument
Freed Transformer
GE Apparatus Sales
General Instrument
General Radio Co.
Goslin Elect. & Mfg. Co.
Gramer-Halldorson Transf.
Gulton Industries
Harder Co., Donald C.
Houlihan Co
Hycor Co., Inc.
Jeffries Transf. Co.
Kearfott Co.
Keystone Products
Lear, Inc.
Leetronics, Inc.
Lenkurt Electric
Litton Ind. of Md.
Magnavox Co.
Magnetic Instr. Co.
Magnetic Res. Co
Magnetico, Inc.
Maurey Inst. Corp
Magnetic Specialties
Mechaponents Div.
Mico Instr. Co.
Motordyne, Inc.
National Co.
Natl. Aircraft Corp.
New York Transformer
Norden-Ketay Corp.
North Hills Elect.
Norwood Controls
Opad Electric Co
Orthro Filter Corp.
Osborne Electric
PCA Electronics
Pax Electronics
Polyphase Instr. Co.
Pulse Engrg., Inc.
Railway Communications
Ratigan Electronics
Raypar, Inc.
Raytheon Mfg. Co.
Sangamo Electric
Sickles Div.
Southw. Indust. Electronics
Standard Electronics Co.
Std. Electric Prods.
Tech. Material Corp.
Thermador Elect. Mfg.
Torwico Electronics
Telex, Inc.
Texas Insts., Inc.
Tobe Deutschmann Corp.
Torwico Electronics
Transformers, Inc.
Triad Transf. Corp.
Tri-Dex Electronics

United States Electronics
United Transf. Corp.
Universal Mfg. Co.
Valor Electronics
Vari-L Co., Inc.
Virginia Electronics
Wang Labs
Warren Mfg. Co.
Waters Mfg
Westinghouse Electric
Wheeler Electronic Corp.

COILS, Transformer

Acme Electric Corp.
Acme Wire Co.
Aerovox Corp.
AiResearch Mfg.
Airpax Products
All-Tronics, Inc.
Altec Lansing
American Monarch
Amplifier Co. of Amer.
Atlantic Transf. Div.
Atlas Engrg. Co.
Avion Div.
Basler Elect.
Better Coil & Trans
Cambridge Thermionic
Carad Corp.
Caledonia Electronics
Calif. Magnetic Cont. Corp.
Calmag Div.
Carol Electronics
Chicago Std. Transf. Corp.
Clippard Instr. Lab.
Comar Electric
Communications Access.
Control Components Co.
Cooper Co., Clark
Dano Electric
Dei Electronics Co
Dietz Design & Mfg.
Dinion Coil Co.
Dittmore & Freimuth
Dormeyer Industries
Durakool, Inc.
Eastern Specialty Co.
Edwards Co., Inc.
Electrical Windings
Electricoil Transf.
Electronic Transf. Co.
Essex Wire Co.
Ferranti Electric
Filtron Co., Inc.
Freed Transf. Co.
Good-All Electric Mfg.
Gordos Corp.
Goslin Electric
Gramer-Halldorson Transf.
Green Rectifier Co
Harder Co., Donald C.
Harris Co., Arthur
Hevi-Duty Electric
Hycor Div.
Indust. Rectifier Devices
James Vibrapowr Co.
Jeffries Transf. Co.
Knopp, Inc.
Lear, Inc.
Lenkurt Electric
Magnatran Inc.
Magnavox Co.
Magnetic Instr. Co.
Mechaponents Div.
Merit Transf. Corp.
Microtran Co.
Mt. Sopris Instr. Co.
Munston Mfg. & Service
NYT Electronics
Natl. Aircraft Corp.
New York Coil Co.
New York Transformer
Nothelfer Winding Labs.
North Hills Electric
Opad Electric Co.
Orthro Filter Corp.
Osborne Electric Co.
P. C. A. Electronics
Pacific Instr. Co.
Pax Electronics
Polyphase Instr. Co.
Pulse Engrg., Inc.
Ransom Research
Ratigan Electronics
Raypar, Inc.
Reed & Reese
Sangamo Electric
Small Motors, Inc.
Sorensen & Co.
Southw. Indust. Electronics
Specialties, Inc.
Spellman Television
Std. Electrical Prods.
Sterling Transf. Corp.
Sylvania Elec. Prods.
Tech. Material Corp.
Technitrol Engrg.
Telex, Inc.
Texas Insts., Inc.
Thermador Elect. Mfg. Co.
Thordarson-Meissner
Torwico Elects., Inc.
Transvision, Inc.
Triad Transf. Corp.
Tri-Dex Electronics
United States Electronics
United Transf. Corp.
Universal X-Ray Prods.
Virginia Electronics
Warren Mfg. Co.
Waters Mfg.
Westinghouse Electric
Wheeler Electronic Corp.
Wirt Co.

COIN OPERATED DEVICES

Commercial Controls
Kopp Scientific
Rhodes, Inc.
Transvision, Inc.

COLLIMATORS, Vertical

Amer. Optical
Berger & Sons
Brunson Instr.
Davidson Mfg. Co.
Dusenbery Co.
Edmund Scientific
Engis Equipt. Co.
Fecker, Inc.
Fish-Schurman
Gaertner Scientific
Garlynn Engrg. Co.
Georator Corp.
Gordon Enterprises
Kollmorgen Optical
Laboratory Optical
Lindly & Co.
Link Aviation Devices
Los Angeles Scientific
Meyer-Opticraft
Nife Inc.
Norden-Ketay
Opto-Metric Tools
Palos Optical
Pan-Technics, Ltd.
Perkin-Elmer
Phoenix Prec. Instr.
QOS Corp.
Stocker & Yale
Tinsley Labs.
Unertl Optical
White Co. Inc.
Wild Heerbrugg
Zoomar Corp.

COLOR ANALYZERS and COMPARATORS, Photoelectric

Allied Engrg. Div.
Amer. Electronic Labs.
Amer. Optical
Ansco
Applied Research Labs.
Avion Div.
Axler Associates
Bausch & Lomb
Beckman Div.
Beckman Instrs.
Berkshire Labs.
Central Scientific
Coleman Insts.
Dearborn Scientific
De-Tec-Tronic Labs.
Electric Sorting Mach. Div.
Electronic Control Corp.
Ercona Corp.
Ess Instr. Co.
Farrand Optical
Fish-Schurman
Fisher Scientific
Gaertner Scientific
Gardner Laboratory
G.E., Apparatus Sales
General Radio
Greiner, Emil
Hallikainen Instruments
Hellige, Inc.
Huggins Labs.
Instrument Devel. Labs.
Jarrell-Ash
Klett Mfg. Co.
Laboratory Optical
Lafayette Instr. Co.
Librascope Inc.
Macbeth Corp.
Madison Elect. Prods.
Meyer-Opticraft
Minneapolis-Honeywell, Rubicon Instrs.
Neutronics Research
Perkin-Elmer Corp.
Pfaltz & Bauer
Phoenix Prec. Instr. Co
Photo Res. Corp.
Photobell Co.
Photoswitch, Inc.
Photovolt Corp.
Precise Measurements
Process & Instruments
Rawson Elect. Instr.
Tarc Electronics Inc.
Telechrome, Inc.
Testing Machines, Inc.
Wallace & Tiernan
Welch Mfg. Co., W. M.
Willmotte, Inc.
Zeiss, Inc., Carl

COLOR COMPARATORS, Visual

Allied Engrg. Div.
Atlas Electric Devices
Austin Co.
Baird-Atomic
Bausch & Lomb
Central Scientific
ConRay Corp.
Electric Eye Equipt.
Electric Sorting Machine
Ercona Corp.
Fisher Scientific
Fish-Schurman
Gaertner Scientific
Gardner Laboratory
Greiner, Emil
Hallikainen Instruments
Hausser & Son
Hellige, Inc
Huggins Labs.
Instrument Devel. Labs.
International Devel. Co.
Jackson Electcl. Instr.
Jarrell-Ash
Kay Electric
Klett Mfg.
Koehler Instr. Co.
Kollmorgen Optical
Laboratory Optical
LaMotte Chemical Prods.
Librascope, Inc.
Macbeth Corp.
Menlo Research Lab.
Munsell Color Co.
Penn Optical & Instr.
Phipps & Bird
Phoenix Prec. Instr.
Photovolt Corp.
Precise Measmts. Co.
Rascher & Betzold
Shasta Div.
Sheffield Corp.
Stoelting Co.
Swedish Gage
Taylor & Co., W. A.
Telechrome, Inc.
Testing Machines, Inc.
Wallace & Tiernan
Weston Instrs.
Zeiss, Inc., Carl

COLOR STANDARDS, see Standards, Color

COLORIMETER TUBES, see Colorimeters, Visual

COLORIMETERS, Photoelectric

Allied Engrg. Div.
Amer. Instr. Co.
Associated Research
Bausch & Lomb
Beckman Div.
Beckman Instrs.
Berkshire Labs.
Biddle Co., James G.
Brinkmann & Co.
Central Scientific
Clay-Adams
Coleman Instruments
Dearborn Scientific
De-Tec-Tronic Labs.
Electric Eye Equipt.
Epic Inc.
Ercona Corp.
Farrand Optical
Fish-Schurman
Fisher Scientific
Gardner Laboratory
Greiner, Emil
Hallikainen Instruments
Hellige, Inc.
Huggins Labs.
Instrumentation Assoc.
Instrument Devel. Labs.
Jarrell-Ash Co.
Klett Mfg. Co.
Kruger Instruments
Leitz, Inc.
Macbeth Corp.
Mass Instruments
Meyer-Opticraft
Mfrs. Engrg. & Equip.
Minneapolis-Honeywell, Rubicon Instrs.
Munsell Color
Phoenix Prec. Instr.
Photovolt Corp.
Photron Instr. Co.
Process Instruments
Scientific Glass App.
Specialties, Inc.
Technical Prods. Co.
Telechrome, Inc.
United Optical
Wilkens-Anderson
Will Corp.
Zeiss, Inc., Carl

COLORIMETERS, Visual

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Amer. Optical
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Bellco Glass Inc.
Central Scientific
Coleman Instr. Co.
Ercona Corp.
Fischer & Porter Co.
Fish-Schurman
Fisher Scientific
Gardner Laboratory
Greiner Co., Emil
Hausser & Son
Helio Instr. Co.
Hellige, Inc.
Instrument Devel. Labs.
International Devel. Co.
Jarrell-Ash
Klett Mfg.
Koehler Instr. Co.
Kollmorgen Optical
Kontes Glass Co.
Labline, Inc.
La Motte Chem. Prod.
Macbeth Corp.
Munsell Color Co.
Opplem Co.
Phoenix Prec. Instr.
Precise Measmts. Co.
Precision Scientific
Rascher & Betzold
Taylor & Co., W. A.
Technical Prods. Co.
Weston Instrs.
Zeiss, Inc., Carl

COLUMBIUM

Belmont Smelt. & Ref.
Fansteel Metallurgical

COLUMNS, Ion Exchange, see Ion Exchange Columns

COMBUSTION CONTROL EQUIPMENT (see also Boiler Room Instruments, also Furnace Control)

Askania Reg. Co.
Assembly Products
Bailey Meter Co.
Barber-Colman
Beckman Div.
Bristol Co.
Burrell Corp.
Cambridge Instr. Co.
Cardinal Instrumentation
Cash Co., A. W.
Cleveland Controls
Combustion Control Corp.
Consol. Controls Corp.
Continental Foundry
Cope: Vulcan Div.
Cutler-Hammer
Davis Emergency Equipt.
Defender Instr. & Reg.
De-Tec-Tronic Corp.
Eclipse Fuel Engrg. Co.
Electron-Radar Prods.
Electronic Prods. Co.
Electronics Corp. of Amer.
Ellison Draft Gage Co.
Engelhard, Inc., Chas.
Ess Instr. Co.
Fischer & Porter Co.
Fisher Governor
Foster Engrg. Co.
Foxboro Co.
Furst Electronics
Genl. Regulator Corp.
General Controls Co.
G.E., Apparatus Sales
General Regulator Corp.
Gordon Co., Claud S.
Hagan Chem. & Controls
Hammel-Dahl
Hays Corp.
Heat-Timer Corp.
Jo Bell Products
Lake Erie Electric
Larson Instr.
Leeds & Northrup
Mason-Neilan Div.
Mercoid Corp.
Mine Safety Appliances
Minneapolis-Honeywell
Moore Products
National Brass Co.
Natural Gas Equipt.
Orban Co., Kurt
Partlow Corp.
Perfex Div.
Controls Div.
Reliance Instr. Mfg.
Republic Flow Meters
R.K.L. Valve & Mfg. Co.
Selas Corp.
Shallcross Controls
Smok-Trol Corp.
Soreng Products
Surface Combustion Corp.
Taller & Cooper, Inc.
Taylor Instr. Cos.
Thermco Labs.
Victory Engrg. Corp.
Wheelco Instr. Div.
Worner Electronic Devices

COMBUSTION INDICATORS and/or RECORDERS, see Boiler Room Instruments, also Gas Analyzers

COMBUSTION SAFEGUARDS, including Flame Failure

Assembly Products
Barber-Colman
Baso Inc.
Bristol Co.
Cardinal Instrumentation
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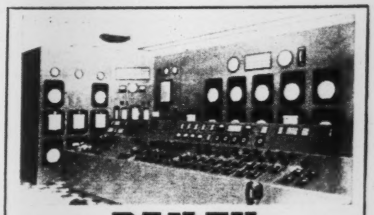
Dietz Co., Henry G.
Eclipse Fuel Engrg. Co.
Electron-Radar Prods.
Electronic Control Corp.
Electronics Corp. of Amer.
Energy Kontrols
Ess Instr. Co.
GE Apparatus Sales
General Controls Co.
Larson Instr. Co.
Mercoid Corp.
Minneapolis-Honeywell
Partlow Corp.
Photo Crystals, Inc.
Selas Corp. of Amer.
Worner Elects. Devices

COMMUNICATION MEASURING INSTRUMENTS

Adler Electronics
Aircraft Radio
Alden Electronic
Alden Products
All-Tronics, Inc.
Alto Scientific
Amer. Electroneering
Amer. Mach. & Foundry
Amplifier Co.
Ark Engrg.
Automatic Electric
Avion Div.
BJ Electronics
Ballantine Labs.
Boonton Radio
Brunswick Instruments
Brush Electronics
Cal-Tronics Corp.
Clarke Instr. Corp.
Clegg Labs., Inc.
Clough-Brengle
Communications Meas. Lab.
Dale Instruments
Daven Co.
Daystrom Instrument
Diamond Antenna & Microwave
Donner Scientific
D & R Limited
Elect. Indicator Co.
Electric Des. & Mfg.
Electronic Assocs.
Electronic Devel. Lab.
Electronic Tube Corp.
Empire Devices Prod.
Esterline-Angus
Federal Telephone & Radio
Feiler Engrg. Co.
Ferris Instr. Corp.
Freed Transf. Co.
GE
General Radio
Hammarlund Mfg.
Harvey Radio Labs.
Henschel Corp.
Hewlett-Packard
Hickok Electcl. Instr.
Hycon Mfg. Co.
Industrial Inst. Co.
Kahn & Co.
Kaiser Aircraft & Elect.
Kay Electric
Kellogg Switchboard
Leeds & Northrup
Lenkurt Electric
Manson Labs.
Marconi Instruments
Measurements Corp.
Microphase Corp.
Millen Mfg. Co.
Muirhead Instrument
Nems-Clarke, Inc.



BAILEY

Combustion

CONTROL

- Bailey Automatic Combustion Control results in substantial savings in fuel; increased boiler capacity; reduction of boiler and furnace maintenance; more time for operators to devote to general station maintenance; and improvement in the general character of service.

Bailey Automatic Combustion Control makes possible the every day operation of boilers at test efficiencies, because it is a COMPLETE combustion control system which: (1) automatically maintains steam pressure by supplying fuel and air simultaneously to boilers in accordance with changes in steam demand; (2) automatically maintains most economical fuel-air ratio by incorporating the Bailey Boiler Meter as an integral part of the system; (3) automatically maintains the desired furnace draft; and (4) automatically distributes load among boilers so that each unit carries its share.

This sturdy, inexpensive, air-operated control system has been applied to all sizes and types of boilers ranging from 200 hp upward. It is applicable to all fuels and all methods of firing.

Request Bulletin 1022 and Bulletin 1023.

BAILEY METER COMPANY
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Bailey Meter Company Ltd., Montreal, Canada

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Nuclear Electronics
Pacific Instr. Co.
Precision App. Co.
Premier Crystal Labs.
Radio City Products
Radio Frequency Labs.
Raypar, Inc.
Raytheon Mfg. Co.
RCA Div.
Rubicon Co.
Scott, Inc., Hermon H.
Sensitive Research Instr.
Servo Corp. of Amer.
Shallcross Mfg.
Sherron Metallic Corp.
Sierra Electronic
Simpson Electric Co.
Sound Apparatus
Sperry Gyroscope
Stafford Co.
Steima, Inc.
Sylvania Elect. Prods.
Technology Instr. Div.
Thordarson-Meissner
Trimount Instr. Co.
Triplett Elect. Instr.
United Optical Mfg.
Vapor Recovery Systems
Vectron, Inc.
Virginia Electronics
WacLine, Inc.
Wang Labs. Inc.
West Coast Electronics
Westinghouse Electric
Weston Instrs.

COMMUTATORS, Including Collector Rings

Airflyte Electronics
AiResearch Mfg. Co.
Applied Science Corp.
Arnoux Corp.
Autron Engrg.
Breeze Corps., Inc.
Collectron Corp.
Daven Co.
Electro-Mechanical Res.
Electro-Miniatures
Electro Tec. Corp.
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Gibson Electric Co.
Graphik Circuits, Div.
Graphite Metallizing Corp.
Instrument Dev. Labs.
Lamtex Industries
Marble-Card Electric
Nankervis Co., Geo.
Northam Electronics
Packard-Bell Electronics
Photocircuits Corp.
Poly-Scientific Corp.
Spencer Thermostat Div.

COMPARATOR GAGES, see Dimensional Gages, Pneumatic, etc.

COMPARATORS, Electrical Resistance, see Resistance Comparators

COMPARATORS, Mechanical, see Dimensional Gages, Mechanical

COMPARATORS, Optical, see Dimensional Gages, Optical

COMPARATORS, Surface Finish, see Dimensional Gages, Surface Finish

COMPARATORS, Voltage, see Voltage Comparators

COMPASSES, Aircraft

Aircraft Radio
Airpath Instr. Co.
Arma Div.
Autoflight Inst. Div.
Bendix, Eclipse-Pioneer
Borg. Corp.
Electro-Mec. Lab.
Elgin Natl. Watch
Flight Research Eng.
GE, Apparatus Sales
Giannini & Co.
Hull Mfg.
Instr. Assocs.
Kearfott Co.
Koehler Instr. Co.
Kollsman Instr. Corp.
Marine Compass
Matisa Equipt. Corp.
Moisture Register Co.
Norden-Ketay
RCA Div.
Sperry Gyroscope
Star Compass Co.
Summers Gyroscope
Suverkrop Instruments
U. S. Gauge Div.

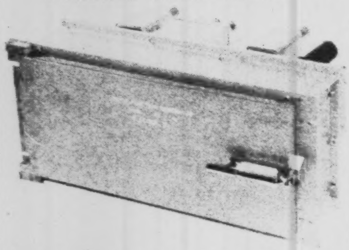
COMPASSES, Automobile

Arma Div.
Amer. Thermo Ware Co.
Hull Mfg.
Marine Compass Co.
Star Compass Co.
Thermometer Corp.
U. S. Gauge Div.

COMPASSES, Azimuth

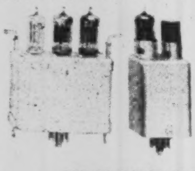
Abrams Instr. Co.
Ainsworth & Sons
Arma Div.
Belock Instr.
Bendix Aviation Corp.
Berger & Sons
Brunson Instr. Co.
Dusenbery Co.
G. E. Apparatus Sales
Garlynn Engrg. Co.
Gurley, W. & L. E.
Hopp Press
Kearfott Co.
Keuffel & Esser
Kollsman Instr. Co.

DIODE FUNCTION GENERATOR
featuring a
PUNCHED CARD MEMORY



A new concept in non-linear analog function generators which gives your computation facility INCREASED COMPUTATION CAPACITY and LOWER OPERATING COSTS through FUNCTION PROGRAMMING IN SECONDS. PERMANENT RECORDS OF FUNCTIONS GENERATED. ELIMINATION OF CONTINUAL FUNCTION CHECKING. ABSOLUTE ACCURACY 0.1%. REPEATIBILITY 0.02%.

The punched card memory of the Model 100 enables pre-programming and therefore eliminates costly idle time on the entire computer facility while programming non-linear functions. An entire rack of function generators may be set up while replacing a patch board. Operating personnel are freed from repetitive programming. Multiple shift operation and short problem runs are made possible by reduction in computer set up time. Cost per productive hour is thereby reduced.



MODEL 1-A DC AMPLIFIER and MODEL 1-C CHOPPER AMPLIFIER

These are computer-quality dc amplifiers in a plug-in package that is readily integrated into your equipment. All-metal cases provide ruggedness and shielding.

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ELECTRONIC
CONTROL & COMPUTER EQUIPMENT
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- Solu-Bridge—Type RD
- Solu-Bridge Controller—Type RE
- Self-balancing Indicator-Controller—Type RI

Also

Recording instruments for all conductivity applications in both line and battery powered types.

Write for complete catalog

Industrial Instruments Inc.
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For more information circle **73** on inquiry card.

Leupold & Stevens
Los Angeles Scientific
Marine Compass Co.
Negus, T. S. & J. D.
Norden-Ketay
Pioneer Instr. Co.
Ritchie & Son
Summers Gyroscope
Suverkrop Instruments
Taylor Instr. Cos.
Warren-Knight
Wild Heerbrugg

COMPASSES, Dip

Dusenbery Co.
Garlynn Engrg. Co.
Gurley, W. & L. E.
Keuffel & Esser
Marine Compass Co.
Los Angeles Scientific
Post Co.
Ruska Instr. Corp.
Sprengnether Instr.
Suverkrop Instruments
Taylor Instr. Cos.
Warren-Knight
Welch Mfg. Co., W. M.

COMPASSES, Drafting Room, see Drawing Instruments

COMPASSES, Gyro

Aircraft Radio
Arma Div.
Belock Instr.
Bendix, Eclipse-Pioneer
Daystrom-Pacific
Flight Research Eng.
GE, Apparatus Sales
Instr. Associates
Kearfott Co.
Lear Inc.
Norden-Ketay
Pacific Scientific
Sperry Gyroscope
Summers Gyroscope
Vectron, Inc.

COMPASSES, Luminous Prismatic

Brunson Instr. Co.
Can. Rad. & Uran.
Dietzgen Co.
Kollsman Instr. Co.
Marine Compass Co.
Ritchie & Son
Scope Instr. Corp.
Suverkrop Instruments
Taylor Instr. Cos.
White Co., Inc., David

COMPASSES, Magnetic

Ainsworth & Sons
Airpath Instrument
Amer. Thermo Ware
Baker Compass Co.
Belock Instr.
Bendix, Eclipse-Pioneer
Berger & Sons
Brunson Instr. Co.
Central Scientific
Collins Radio
Dietzgen Co.
Dusenbery Co.
Electro-Mec Lab.
Flight Research Co.
Garlynn Engrg. Co.
G E
Georator Corp.
Gurley, W. & L. E.
Hand & Sons
Hull Mfg.
Instr. Assocs.
Kearfott Co.
Keuffel & Esser
Kollsman Instr. Corp.
Leupold & Stevens
Marble-Card Electric
Marine Compass Co.
Marshall Co.
Negus T. S. & J. D.
Norden-Ketay
Northwest Instrument
Post Co.
Ritchie & Son
Ruska Instr. Co.
Smith & Anderson
Standard Science Supply
Star Compass Co.
Summers Gyroscope
Suverkrop Instruments
Taylor Instr. Cos.
Thermometer Corp.
U. S. Gauge Div.
Warren-Knight
Welch Mfg. Co., W. M.
David White Co., Inc.

COMPASSES, Marine

Aircraft Radio Corp.
Airpath Instr.
Arma Div.
Baker Compass Co.
Belock Instr.
Bendix Aviation Corp.
Bliss & Co.
Bunnell Co.
Daystrom Instrument
Dirigo Compass & Instr.
Dusenbery Co.
Georator Corp.
Hand & Sons
Hull Mfg.
Inst. Corp. of Fla.
Lear, Inc.
Marine Compass Co.
Negus T. S. & J. D.
Ritchie & Son
Scope Instr. Corp.
Smith & Anderson
Sperry Gyroscope
Star Compass Co.
Thermometer Corp. of Amer.
Welch Mfg. Co., W. M.

COMPASSES, Radio

Aircraft Radio Corp.
Bendix, Eclipse-Pioneer
Collins Radio
Fairchild (**Syosset**)
Fisher Research Lab.
Hickok Electcl. Instr.
Inst. Corp. of Fla.
Kaar Engrg. Co.
Kearfott Co., Inc.
Lear, Inc.
RCA Div.
Thordarson-Meissner
Transval Engrg. Corp.
Triumph Mfg. Co.

COMPASSES, Ship, see Compasses, Marine

COMPASSES, Telltale, see Compasses, Marine

COMPENSATION, Magnetic

Airpath Instrument
Dirigo Compass & Instr.
Dusenbery Co.
G E. Apparatus Sales
Georator Corp.
Hand & Sons
Marine Compass Co.
Moore Corp., John B.

COMPOSITION ANALYZERS, see Analytical Instruments

COMPOUNDS, Cleaning, see, Cleaning Compounds

COMPRESSION TESTING MACHINES, see Testing Machines

COMPRESSORS, Instrument-Air, see Air Compressors

COMPUTERS, Analog, Electronic

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AiResearch Mfg. Co.
Allegany Instr. Co.
Amer. Electronic Labs.
Amer. Mach. & Foundry
Analogue Controls, Inc.
Arma Div.
Atomic Instr. Co.
Audio Instr. Co.
Austin Co.
Autonetics Div.
Avion Div.
Baird-Atomic, Inc.
Bell Aircraft Corp.
Belock Instr.
Bendix Aviation Corp.
Berkeley Div.
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C. G. S. Labs.
Cal-Tronics
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Computer Engrg. Assocs.
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Curtiss-Wright
Detroit Contrls., Mil. Prods.
Donner Scientific
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Electro Precision
Electrol, Inc.
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Erco Div.
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Fed. Telephone & Radio
Feedback Controls
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Franklin Electronics
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Gap Instr. Co.
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Giannini & Co.
Goodyear Aircraft
Hanson-Gorrill-Brian
Hathaway Instr. Co.
I-L-S Instr. Corp.
Industrial Control Co.
Industrial Gauges Corp.
Instr. Components, Inc.
Instr. Dev. Labs.
Jack Scient. Instr.
Kaiser Aircraft & Elect.
Kearfott Co.
Kollsman Instr. Corp.
Librascope, Inc.
Link Aviation
Lucian Labs
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Metrolog Corp.
Mid-Century Instrumatic
Minneapolis-Honeywell, Indus. Div.
Northam Electronics
Norden-Ketay
North Amer. Philips
Nuclear Devel. Corp.
Nuclear Corp. of Amer.
Orban Co., Kurt
Oster Mfg. Co., John
Panellit, Inc.
Parsons Co., Ralph M.
Philbrick Researches
Photobell Co.
Pioneer Magnetics
Raytheon Mfg.
Reeves Instr. Corp.
Reflectone Corp.
Remington Rand
Seismograph Service Corp.
Servo Corp. of America
Servomechanisms, Inc.
Servonics, Inc.
Southw. Indust. Electronic
Specialties, Inc.
Stavid Engrg., Inc.
Std. Elect. Time Co.
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Systems Div., Beckman
Taller & Cooper
Tammen & Denison
Texas Insts., Inc.
Topp Industries
Transistor Devices
Transval Engrg. Corp.
Ultrasonic Corp.
Vectron, Inc.
Waldorf Instr. Co.
Wang Labs.
Weston Instrs.
Westronics, Inc.

COMPUTERS, Digital, Electronic, see also Digital Building Blocks

ACF Electronics
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Airborne Instr. Lab.
Alcor Electronics
Allegany Instr. Co.
ALWAC Corp.
Amer. Electronics Labs
Amer. Mach. & Foundry
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Austin Co.
Automation Management
Autonetics Div.
Avion Div.
Baird-Atomic
Bell Aircraft Corp.
Belock Instr.
Bendix, Computer Div.
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Cal-Tronics
Cedar Engrg., Inc.
Clevite Res. Center
Computer Control Co.
Consolidated Avionics
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Cook Electric
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Dynametrics Corp.
ElectroData Div.
Electro Precision
Electronic Control Systems
Electronics Corp. of Amer.
Epsco, Inc.
Fed. Telephone & Radio
Ferranti Electric
Ford Instr. Co.
Forro Scientific
GE, Apparatus Sales
Geotechnical Corp.
Giannini & Co.
Goodyear Aircraft
Hogan Labs.
Hoover Electronics
Indust. Electronic Engrs.
Internat. Business Machs.
International Telemeter
Kaiser Aircraft & Elect.
Kearfott Co.
Lab. for Electronics
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Librascope, Burbank Div.
Litton, Elect. Equip. Div.
Loral Electronics
Magnavox Co.
Magnetics Res. Co.
Management Assistance
Marchant Calculators
Minneapolis-Honeywell, Indus. Div.
Monroe Calc. Mach. Co.
Mountain Systems, Inc.
National Co.
Natl. Cash Register
Navigation Computer
Neutronics Research
Non-Linear Systems
Norden-Ketay
North American Philips
Nuclear Devel. Corp.
Nuclear Corp. of Amer.
Orban Co., Kurt
Oster Mfg. Co., John
Packard Bell-Electrns.
Philco Corp.
Photobell Co.
Potter Instr. Co.
Radio Corp. of Amer.
Ransom Research
Raytheon Mfg.
Reflectone Corp.
Remington Rand
Royal McBee Corp.
Servo Corp. of Amer.
Soroban Engrg.
Sterling Precision
Sylvania Elec. Prods.
Systematics, Inc.
Systems Div., Beckman
Taller & Cooper
Technitrol Engrg. Co.
Telemeter Magnetics, Inc.
Texas Insts., Inc.
Thompson-Ramo
Transistor Applications
Ultrasonic Corp.
Walkirt Co.
Waldorf Instr. Co.
Wang Labs., Inc.
Westronics, Inc.

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Arma Div.
Averback Electronics
Automation Management
Autonetics Div.
Beckman Div.
Bell Aircraft Corp.
Belock Instr.
Bendix Computer
Bristol Co.
Chadwick Helmuth Co.
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Cook Electric
Daystrom Systems
Edison, Thomas A.
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Electro-Mechanical Res.
Electro Precision
Electronics Corp. of Amer.
Epsco, Inc.
Ford Instr. Co.
Friden, Inc.
Gap Instr. Corp.
Gerber Scientific Instr.
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Hagan Chem. & Controls
Industrial Control Co.
Inco Co.
Internat. Business Machs.
Kearfott Co.
Librascope, Inc.
Lucian Labs
Management Assistance
Marchant Calculators
Metrolog Corp.
Miljan, Inc.
Minneapolis-Honeywell, Indus. Div.
Monroe Calc. Machs.
Norden-Ketay
North Electric
Nuclear Devel. Corp.
Orban Co., Kurt
PIC Design Corp.
Philbrick Researches
Reeves Instr. Corp.
Reflectone Corp.
Remington-Rand Univac
Royal McBee Corp.
Servomechanisms, Inc.
Shepard Lab.
Soroban Engrg.
Southwestern Ind. Elec.
Stavid Engrg., Inc.
Systematics Inc.
Taller & Cooper, Inc.
Technitrol Engrg.
Texas Insts., Inc.
Underwood Corp.
Utility Supply Co.
Voltron Products
Waldorf Instr. Co.
Wang Laboratories, Inc.

CONCENTRATION RECORDERS, see Analytical Instruments, pH, etc.

CONCRETE and CEMENT TEST APPARATUS

Amer. Instr. Co.
Ann Arbor Instr. Wks.
Autoclave Engrs.
Baldwin-Lima-Hamilton
Blue M Electric
Borden Engrg. Co.
Bowen & Co.
Brabender Instrs.
Burrell Corp.
Carver, Fred S.
Central Scientific
Custom Scientific Insts.
Dillon & Co., W. C.
Electro Prod. Labs
Emery Co.
Exact Weight Scale
Fisher Scientific
Greiner, Emil
Hacker & Co.
Hayes Scientific App.
Humboldt Mfg. Co.
Kinetic Instr. Co.
Olsen Testing Machine
Opplem Co.
Precision Scientific
Ramsey Engrg. Co.
Riehle Div.
Scientific Instr. Co.
Scott Testers
Sodemann Heat & Power Co.
Steel City Testing Machs.
Soiltest, Inc.
Taber Instr. Co.
Testing Machines, Inc.
Western Machy. Co.

CONDENSATION CONTROLLERS, see Boiler Room Instruments

CONDENSER TESTERS, see Boiler Room Instruments, also Capacitance Indicators (Electrical)

CONDENSER TUBES, Ceramic

Amer. Lava Corp.
Centralab Div.
General Ceramic
Harshaw Chemical
Internat. Products Corp.
Saxonburg Ceramics
Steatite Div.
Steward Mfg.
Stupakoff Div.
Thermo Materials, Inc.

CONDENSERS, Electric, see Capacitors

CONDUCTIVITY CELLS, Electrical

Allied Controls Co.
Amer. Instr. Co.
Apex Scient.
Bristol Co.
Cambridge Instr. Co.
Central Scientific
Coleman Electric
Continental Electric

Energy Kontrols, Inc
Engelhard Co., Chas
Fisher Scientific
Foxboro Co.
Fredericks Co., George
Gray Instr. Co.
Greiner Co., Emil
Greiner Glassblowing Lab
H-B Instr. Co.
Harshaw Scientific Div
Industrial Insts., Inc
Instrument Lab., Inc
Kahn & Co
Klett Mfg
Leeds & Northrup
Nester Co.
Penfield Mfg. Co
Phoenix Prec. Instr
Photo-Crystals, Inc
Precision Glass Prods
Revere Corp.
Sargent & Co.
Scientific Glass App.
Servall Inc., Ivan
Victory Engrg. Co
Will Corp

CONDUCTIVITY CELLS, Thermal

Beckman Div.
Davis Insts. Div
Federal Telephone & Radio
Gow-Mac Instr. Co
Greiner Co., Emil
Hastings-Raydist
Industrial Instrs
Leeds & Northrup
Mine Safety Appls
Nester Co., L. G
Precision Glass Prods
Servo Corp. of Amer
Victory Engrg. Corp.

CONDUCTIVITY METERS

ACF Electronics
Amer. Instr. Co.
Associated Research Inc
B & K Mfg
Bailey Meter Co
Biddle Co., James G
Boonton Radio
Bristol Co
Central Scientific
Coleman Instr. Co
Davis Emergency Equipt
Diatron Co.
Dice Co
Electronic Prods. Co
Fielden Instr. Div.
Foxboro Co.
GE Apparatus Sales
General Electronic
Gray Instr. Co
Industrial Insts., Inc
Instrument Lab. Inc
Kahn & Co.
Leeds & Northrup
Magnaflux Corp
Metrol Inc
Minneapolis Honeywell
  Boston Div
Penfield Mfg
Phaostron Co
RCA Div
Revere Corp
Rubicon Co.
Sensitive Res. Instr
Shallcross Mfg
Sherron Metallic Corp
Sticht Co., Herman H
Thwing-Albert
Tipp-Tronic, Inc

CONDUIT, Flexible

Amer. Brass
Amer. Phenolic Corp
Breeze Corporations
Chicago Metal Hose
Conduflex Corp.
Flexaust Co.
Flexonics Corp.
GE
Illinois Coil Spring
Polymer Corp.
Raybestos Manhattan
Stow Mfg.
U. S. Rubber
Univ. Metal Hose

CONES, Pyrometric, see Pyrometric Cones

CONES, Slump, see Pyrometric Cones

CONNECTORS, Electrical, Multi-Pole, including Coaxial Cable

Aerolite Electronics
Aerotech Specialties
Aircraft Radio
AiResearch Mfg. Co.
Alden Products
Allied Industries, Inc
American Brass Co.
Amer. Lava Corp
Ampco Mfg. Co
Amphenol Electronics
Anton Electronics Labs
Armel Electronics
Autom. Switch Co.
Bendix, Scintilla
Blonder-Tongue Labs
Breeze Corporations
Brit. Electronic Sales
Buchanan Electcl. Prods
Burndy Corp.
Cannon Electric
Cinch Mfg. Co.
Circon Components Co.
Coaxial Connector Co.
Consol. Electrodynamics
Continental Connector
Dage Electric
Danbury-Knudsen
DeJur-Amsco
Dialight Corp.
Diamond Instr. Co.
Diamond Mfg. Corp
Dittmore-Freimuth
Dole Valve Co
Eastern Specialty Co
Eby, Inc., Hugh H.
Elco Corp.
Farnsworth Electronics
Felt Corp
GE
General Radio
Good-All Electric Mfg
Gordon Co., Claude S
Gorn Electric
Gulton Industries
Harwood Corp.
Hermetic Sealed Prods.
Instrument Parts Corp.
Jerrold Electronics
Johnson Co., E. F.
Jones Div., Howard B.
Joy Mfg. Co
Kellogg Switchboard
Kings Electronics
Koiled Kords
Kulka Electric Mfg.
Lab-Tronics
Lapp Insulator Co.
Mallory & Co., P. R.
Microdot, Inc
Molded Insulation Co.
Molex Products
Mutual Elect. Indust.
Nems-Clarke, Inc.
Newark Electric Co
North Electric Mfg. Co
Northam-Warren
Parker-Appliance Co.
Patton-MacGuyer Co.
Pax Electronics
Phaostron Co.
Precision Mfg. Co
Precision Parts Co
Progress Electronics
Pyle National
Reliable Electric Co
Remler Co
Rodale Mfg. Co
Seals, Inc
Shielding, Inc
Signal Indicator Corp
States Co.
Steatite Div.
Steel Co., Herman D
Stimpson Co., Edwin B.
Superior Elect. Co.
Swissomatic Products
Switchcraft, Inc
Sylvania Elect. Prods
Tech. Material Corp
Technical Soldering Co
Telex, Inc
Thwing-Albert
Ucinite Co.
U. S. Components
U. S. Gasket Co
U. S. Instr. Corp
Vector Electronic Co
Viking Electric
Viking Industries, Inc
Waltham Horological Corp
Waterbury Cos.
Watertown Mfg. Co
Whitney Blake Co
Wiggins Oil Tool
Winchester Electronics
Wirt Co.

CONNECTORS, Plugs, Clips, Posts, Jacks

Aero Electric
Aerolite Electronics
Aerovox Corp
Aircraft Radio
AiResearch Mfg
Air-O-Tronics
Alden Products
Alden Systems Co.
Amer. Elite, Inc.
Amer. Instr. Co
Amer. Lava Corp.
Ampco Mfg. Co.
Amphenol Electronics
Anton Electronics Labs
Armel Elects
Associated Engrg
Audio Devel. Co
Autocall Co.
Automatic Electric
Autom. & Prec. Mfg. Co.
Baird-Atomic
Bendix, Scintilla
Berkshire Labs
Breeze Corporations
Brit. Electronic Sales
Bud Radio
Buggie & Co.
Burke Electric
Burndy Engrg. Co
Cambridge Thermionic
Cannon Electric
Carter Parts Co.
Cinch Mfg. Co.
Cinema Engrg. Co
Circon Component Co.
Clare & Co.
Coaxial Connector Co.
Conax Corp.
Consol. Electrodynamics
Consolidated Mld. Prods.
Continental Connector
Crow Electri-Craft Corp.
Dage Electric
DeJur-Amsco
DeMornay-Bonardi
Deutsch Co.
Dialight Corp.
Diamond Mfg. Co.
Dittmore & Freimuth
Eastern Specialty Co.
Eby, Inc., Hugh H.
Elco Corp.
Electronics Prods. Co.
Electrosig Corp.
Federal Screw Prods.
Federal Telephone & Radio
Felts Corp.
Garde Mfg. Co.
GE
General Radio
Gorn Electric
Graphik Circuits Div.
Grayhill, Inc.
Gulton Industries
Hartford Mach. Screw
Harvey-Wells Electronics
Hubbell, Inc., Harvey
Indust. Hardw. Mfg.
Instrument Parts Corp
Johnson Co., E. F.
Jones, Howard B., Div
Joy Mfg.
Kellogg Switchboard
Kings Electronics
Koiled Kords
Kulka Electric
Lab-Tronics
Land-Air, Inc
Lectronic Research Labs
Lerco Electronics
Lessells & Assocs.
Lewis Engrg. Co
Lynn Electronic Res
Mallory & Co., P. R
Martindale Electric
Meter Devices Co.
Microdot, Inc.
Millen Mfg. Co.
Molded Insulation Co
Mueller Electric
National Tel-Tronics
North Electric
Nems-Clarke
Newark Electric Co
Peck Spring Co.
Phaostron Co
Precision Mfg. Co
Precision Parts Co
Progress Electronics
Pyle National
Pyrometer Co. of Amer
RCA
Raytheon Mfg. Co
Remler Co
Revere Corp
Richards Co., Inc
Rodale Mfg. Co
Scovill Mfg. Co
Seals, Inc
Shallcross Mfg
Signal Indicator Corp
Smith, Inc., Herman H
Stafford Co
Std. Elect. Time Co
States Co
Steel Co., Herman D
Stronghold Screw Prods
Superior Electric
Swissomatic Products
Switchcraft, Inc
Sylvania Elect. Prods
Taurus Corp
Telex, Inc.
Thermo-Electric Co
Thwing-Albert
Torrington Co
Ucinite Co.
U. S. Components
U. S. Engrg. Co
U. S. Gasket Co
U. S. Instr. Corp
Vallorbs Jewel Co
Vector Electronic Co
Victor Electronic
Viking Industries
Virginia Electronics
Waltham Horological Corp
Waltham Screw Co.
Whitney Blake Co.
Winchester Electronics
Winslow Co., Inc

CONNECTORS, Printed Circuit

AMP, Inc
Aerolite Electronics
Aerovox Corp
Alden Products
Ampco Mfg. Co
Amphenol Electronics
Anton Electronics Labs
Armel Electronics
Brit. Electronic Sales
Cambridge Thermionic
Cannon Electric
Centralab Div
Cinch Mfg. Co
Circon Component Co
Coaxial Connector Co.
Continental Connector
Continental-Diamond Fibre
Corning Glass Works
DeJur-Amsco
Elco Corp.
Garde Mfg. Co
Gorn Electric
Graphik Circuits Div
Jones Div., Howard B
Lab-Tronics
Lerco Electronics
Microdot, Inc.
Molex Products
National Tel-Tronics
Progress Electronics
Sealectric Switch & Relay
Sylvania Elect. Prods.
U. S. Components, Inc
United Shoe Mach.
Viking Industries, Inc.
Whitney Blake Co
Winchester Electronics

CONSISTENCY REGULATORS, Pulp and Paper

Askania Reg. Co.
Bailey Meter Co.
Brabender Corp.
Bristol Co.
DeZurik Shower Co
Dressen-Barnes
Dynamics Res. Assoc
Electric Eye Equipt. Co
Fischer & Porter Co
Foxboro Co.
General Controls
General Regulator
Hammel-Dahl
Industrial Control Panel
Lumenite Electronic
Mason-Neilan Div.
Merritt Engrg. & Sales
McAlear Mfg.
Northern Equipt. Co.
Ohmart Corp.
Photobell Co.
R. K. L. Valve & Mfg
Shallcross Controls
Taylor Instr. Cos.

CONSTANT SPEED AND FREQUENCY Sets, see Speed or Frequency

CONTACT METERS, see D'Arsonval-type Controllers

CONTACTORS, see Relays

CONTACTS, Electrical, including Carbon, Metal, Graphite, Powdered Metal,

Amp. Inc., and Tungsten
Acheson Colloids
Adams & Westlake
Airflyte Electronics
Alden Products
Amer. Electro-Metal
Amer. Silver Co.
Baker & Co.
Brainin Co.
Cannon Electric
Carbon Div.
Cinch Mfg. Co.
Circon Compt
Cleveland Tungsten, Inc
Coaxial Connector Co.
Diamond Instr. Co
Eby, Inc., Hugh H.
Electro Miniatures
Electronic Parts Mfg
Fansteel Metallurgical
Fineisen, A. R
GE Metall. Prod. Div
General Control Co
General Plate Div
General Tungsten Mfg.
Gibson Electric
Graphite Metallizing
Grammes & Sons, Inc.
Guardian Electric Mfg
Hermetic Sealed Prods.
Howard Clock
Instr. Parts Corp.
Instrument Specialties
Johnson Co., E. F.
Keystone Carbon Co
Mallory & Co., P. R
Morganite, Inc
National Carbon Co.
New Haven Clock
Ney Co.
Ohio Carbon Co
Pax Electronics
Peck Spring Co
Permo Prod. Corp
Precision Mfg. Co
Reisner Mfg.
Scovill Mfg
Sealectric Switch & Relay
Sittler Corp.
Speer Carbon Co
Sphinx American Co.
Stackpole Carbon Co.
Staver Co., Inc.
Steel Co., Herman D
Stimpson Co.
Swiss Amer. Jewel Bear
Sylvania Elect. Prods.
Tinnerman Products
Trerice Co
Tungsten Contact Mfg
Ucinite Co.
Vallorbs Jewel Co
Viking Industries
Waterbury Cos.
Willey's Carbide Tool Co
Wilson Co., H. A.

CONTACTS, Precious Metal, including Platinum and Silver

Airflyte Electronics Co
Amer. Kloeckner-Moeller
Amer. Platinum Works
Amer. Silver Co.
Automatic Electric
Baker & Co.
Bishop & Co., J
Brainin Co.
Carbon Div
Cohn Corp., Sigmund
Deringer Metallurgical
Electro Miniatures
Fansteel Metallurgical
Fineisen, A. R
Fischer & Porter
General Control Co
General Plate Div
Gibson Electric
Grammes & Sons
Graphite Metallizing
Guardian Electric
Hamilton Watch Co
Instrument Corp. of Amer.
Instrument Parts Corp.
Keystone Carbon Co.
Mallory & Co., P. R.
Microcircuits Co.
Ney Co., J. M.
Ohio Carbon Co.
Permo Prods. Corp.
Precision Mfg. Co.
Preco Co.
Research Devel. Mfg.
Sherman & Co.
Slip Ring Co. of Amer.
Speer Carbon Co.
Stackpole Carbon Co.
Staver Co., Inc
Swissomatic Products
Sylvania Elect. Prods.
Wilson Co., H. A.

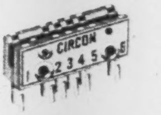
CONTOUR MEASURING PROJECTORS, see Dimensional Gages, Optical

CONTROL BOARDS and HOUSINGS, see Panels

CIRCON

SPECIALIZED MINIATURE and SUB-MINIATURE ELECTRONIC-INSTRUMENT EQUIPMENT

PRINTED CIRCUIT CONNECTORS



FEMALE—Compression loaded Female Connectors give a wide range of flexibility of contact arrangement, cabling, and design application. They are open end design for all standard circuit thicknesses in one and two ampere models, 4, 12, 24, 36, 48, and 60 contacts—IN STOCK

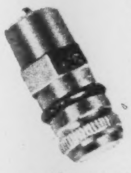
MALE Connectors in compatible sizes give two-way cabling to precision printed or instrument circuits with highest contact performance. All connectors exceed temperature requirements MIL-E-5400, humidity MIL-P-15035, Type PRE-P, and conform to N.E.M.A. tolerances.

MINIATURE PRECISION HARDWARE

Finest premium quality instrument and electronic hardware. Instrument screws, nuts, split lock and flat washers. Gold plated, shot burnished instrument rivets and eyelets. Hundreds of sizes start at 1/32" x 1/16" and up in 1/32" increments—IN STOCK

MICROMINIATURE Terminal Lugs for extremely compact printed circuits and other electronic and instrument applications.

MINIATURE and SUBMINIATURE INDICATOR LAMP ASSEMBLIES



Smaller size for printed or regular circuits. Over 1000 on a 12" panel. Available in 1.3, 2.7 6, 14, 28 volts and neon. Wide range of light intensities for both low-level and high-level applications. Standard and special message indications and colors including numerals, warnings, letters, and labels. Circon "Litestrip" of ten indicator lamps reading from 0 to 9 in stock. Finest quality materials and sealed construction for military end use and finest commercial applications.

Representatives in United States and Canada

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COMPONENT CORPORATION
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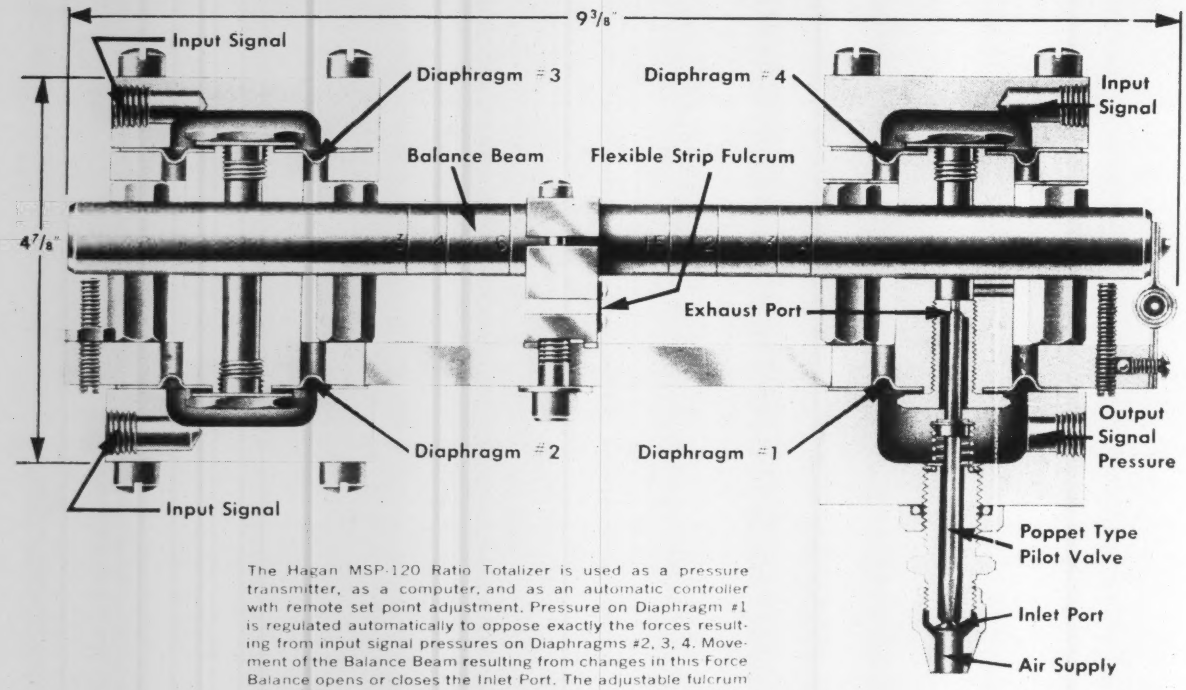

The Hagan MSP-120 Ratio Totalizer is used as a pressure transmitter, as a computer, and as an automatic controller with remote set point adjustment. Pressure on Diaphragm #1 is regulated automatically to oppose exactly the forces resulting from input signal pressures on Diaphragms #2, 3, 4. Movement of the Balance Beam resulting from changes in this Force Balance opens or closes the Inlet Port. The adjustable fulcrum determines the relation between incoming and output signals.

new Hagan Ratio Totalizer Features . . . CUSTOM CONSTRUCTION AT STOCK PRICE, GREATER SENSITIVITY, FLEXIBILITY

New design features of the Hagan Ratio Totalizer—reduced spring rate, greater built-in stability, and diversity of components—make this pneumatic unit the most versatile, low cost controller-computer available today.

Low cost because the available components permit custom ordering to meet your specific control needs at standard stock prices. A typical unit is just $93.

Versatile because any input chamber can be equipped with various diaphragms or bellows to handle pressures up to 600 psi. A roller bearing fulcrum is available that has passed military shock and vibration tests. Optional MicroLoc poppet valves are removable for periodic maintenance and require no re-setting adjustment.

The unit is more sensitive than ever throughout the 3-15, 0-30 and 0-60 output pressure ranges.

No matter what the requirements . . . proportional, integral or rate action . . . addition, subtraction, multiplication or ratio functions . . . this 15-lb. controller handles the job with all the accuracy and sensitivity of larger, more complicated units.

For complete information write for Bulletin MSP-120.

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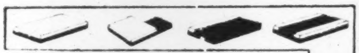
HAGAN BUILDING, PITTSBURGH 30, PENNSYLVANIA
DIVISIONS: CALGON COMPANY, HALL LABORATORIES
IN CANADA: HAGAN CORPORATION (CANADA) LIMITED, TORONTO

For more information circle **75** on inquiry card.



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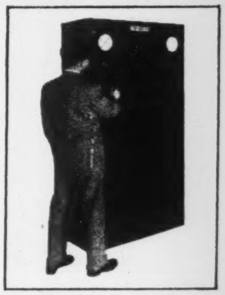
GE Apparatus Sales
General Control Co
General Controls Co
Genl. Reg. Corp
Giannini & Co.
Gilmore Industries
Gustaveson, Inc.
Hagan Chem. & Controls
Hesse-Eastern
Indust. Electronics Eng
Infilco
Johnson Service Co
Jordan Corp.
Keckley Co., O. C
Kieley & Mueller
Lake Erie Electric
Lear, Inc.
Leeds & Northrup
Leslie Co.
Link Engrg. Co.
Lucian Labs.
Lumenite Electronics
Manning, Maxwell & Moore
Mason-Neilan
Mead Specialties Co.
Mercoid Corp.
Milton Roy Co.
Minneapolis-Honeywell Indust. Div.
Moore Products
Natural Gas Equipt
Panellit, Inc.
Partlow Corp.
Penn Insts. Div
Phila. Gear Works
Phoenix Prec. Inst
Potter Aeronautical
Powers Reg. Co.
Radio Receptor Co
Ramsey Engrg. Co
Robertshaw-Fulton
Ram Meter, Inc.
Regent Controls
Republic Flow Meters
Research Controls
Ross Operating Valve
Scaico Controls
Scientific Instr. Co.
Security Controls, Inc
Seely Instr. Co.
Shallcross Controls
Soroban Engrg.
Squires Co. C. E.
Stratos Div.
Swanson Engrg. Co
Taft-Peirce Mfg.
Tailer & Cooper
Taylor Instr. Cos
Texas Apparatus Co
Thompson Products
Transistor Devices
Trerice Co.
Wallace & Tiernan
Weighing Components
Westinghouse Air Brake Co
Weston Instr.

CONTROL SYSTEMS

ELECTRONIC • PNEUMATIC
HYDRAULIC • ELECTRO-MECHANICAL



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For more information circle **78** on inquiry card.

CONTROL DRIVES, see Cylinders; also Motors, Servo; also Valve Operating Devices

CONTROL SYSTEMS, General-purpose, Air-operated, for Process Control (see also the Object of Control)

ARF Products, Inc.
Accessory Products Corp.
Amer. Kloeckner-Moeller
American Mach. & Foundry
Amer. Meas. & Control
Amer. Meter Co.
Applied Science Corp
Askania, Reg.
Askania-Werke
Atchley, Inc., Raymond
Auto-Control Labs.
Autom. Contr. Co.
Automation Corp. of Amer.
Automation Management
Autom. Timing & Controls
Autron Engineering
B-I-F Industries
Bailey Meter Co.
Barworth, Inc.
Barnes, Co., W. F. & John
Beckman Div.
Black, Sivalls, & Bryson
Bristol Co.
Brit. Electronic Sales
Brookfield Engrg. Labs.
Brooks Rotameter
Bush Associates, G. F.
B W Controller Corp.
Cash Co., A. W.
Cash Valve Mfg. Corp.
Century Controls Corp.
Cleveland Controls, Inc
Control Panel Corp.
Control Specialty Corp
Cook Electric
Cooper Co., Clark
Conoflow Corp.
Crescent Engrg. & Res.
Cunningham, Son & Co. J.
Cutler-Hammer
Dahl Co., Inc., G. W.
Daven Co.
Defender Instr. & Reg.
Devco Engineering
DuBois Engrg. & Mfg.
Electro Devices, Inc.
Engrg. & Res. Corp.
Fairbanks, Morse
Fischer & Porter Co
Fisher Governor
Foxboro Co.
Fulton-Sylphon Div.

CONTROL SYSTEMS, General-purpose, Electrical or Electronic, for Process Control (see also the Object of Control)

ARF Products
Adler Electronics
Advanced Electronics, Inc.
Airborne Acces. Corp
Alabama Automation Corp
Allen Bradley Co.
All-Tronics, Inc.
Amer. Kloeckner-Moeller
Amer. Mach. & Foundry
Amer. Meter Co.
American-Monarch
Amer. Electronic Labs.
Amer. Tradair Corp.
Amglo Corp
Analogue Controls, Inc.
Applied Science Corp
Arma Div.
Arnoux Corp.
Askania Reg.
Askania-Werke, A. G
Assembly Products
Astra Tech. Inst. Corp
Auerbach Electronics
Austin Co.
Autom. Timing & Controls
Automatic Control
Autron Engrg., Inc.
Automatic, Inc.
Automation Corp. of Amer
Automation Management
Automation Prods., Inc.
Avion Div.
Axler Associates
B-I-F Industries
B & H Instrument
BJ Electronics
B/W Controller
Bailey Meter Co.
Baird-Atomic
Baldwin-Lima-Hamilton
Barber-Colman
Barnes Dev. Co
Barnes, Co., W. F. & John
Basic Controls, Inc.
Beckman Instrs.
Belock Instr.
Bendix-Pacific
Berkeley Div.
Bernco Engrg. Corp
Black, Sivalls, & Bryson
Blue M Electric
Bogue Electric Mfg.
Bristol Co.
Brookfield Engrg. Labs
Brooks Rotameter
Burroughs Electronics
Calif. Magnetic Cont. Corp.
Calmag Div.
Cal-Ohm Labs.
Cedar Engrg., Inc
Cincinnati Time Rec. Co.
Clark Controller Co.
Cleveland Controls, Inc
Cleveland Instr.
Commercial Controls Corp
Computer Control Co.
Computer Measurements

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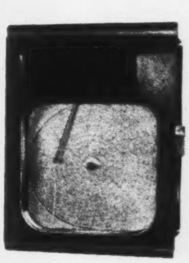
Five kinds of control action: on-off, proportional, reset, derivative, and reset plus derivative, also autoset and cascade controllers, ratio controllers, pneumatic transmission, miniature instruments, program controllers, electronic potentiometers. For temperatures up to 4000F, pressure, absolute pressure, vacuum, draft, liquid level, flow, pH, humidity, time cycle and program, and control panels.

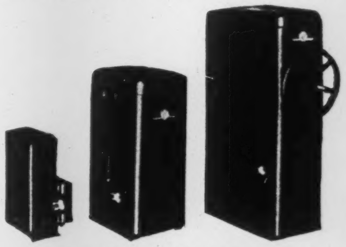
Write for Bulletins A130, DMC44, A115, B226, and C305.



Series 500 Controller

BRISTOL COMPANY
112 Bristol Rd., Waterbury 20, Conn.

For more information circle **77** on inquiry card.



BAILEY CONTROL DRIVES

- These air-operated power units provide precise positioning of regulating devices such as dampers, butterfly valves, hydraulic couplings and feeders in accordance with a pneumatic control signal.

Improves flow characteristics through simple adjustment of positioning relay incorporated in the drives.

Easy installation and choice of location made possible by angular rotation of power take-off plus full assortment of standardized connecting linkage.

Type	Torque (ft-lb)	Max Angular Travel
AC44P	75	75°
AC68P	400	90°
AC816P	1500	90°
AC1016P	2350	90°

Type	Force (lb)	Linear Travel
AC1030P	1600	30 in.
AC1260P	2500	60 in.

Request Product Specification P81-1 for Control Drives and Product Specification P81-5 for control linkage.

BAILEY METER COMPANY
1041 IVANHOE ROAD CLEVELAND, O.
Bailey Meter Company Ltd. Montreal Canada

For more information circle **79** on inquiry card.

Conoflow Corp.
Consol. Electrodynamics
Consolidated Avionics
Control Circuits Inc.
Control Data Corp.
Control Panel Corp.
Control Specialists
Control Specialty Corp.
Cook Electric
Cooper Dev. Corp.
Cooper Co., Clark
Counter & Control Corp.
Crescent Engrg. & Res. Co
Curtiss-Wright
Cutler-Hammer

Datascan Inc.
Datex Corp.
Davenport Mfg. Co.
Daystrom Systems
Defender Instr. & Reg.
Deltron, Inc.
De-Tec-Tronic Corp
Devco Engineering
Diamond Power Spec. Corp
Dietz Co., Henry G.
Digitronics Corp.
Donner Scientific
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DuMont Labs., Allen B.
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Dynamics Res. Assoc.
Dynapar Corp.

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Electro Products Labs.
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Electronic Control Corp.
Electronic Control Sys.
Electronic Spec. Co.
Electronic Tube Corp.
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Erdco Engrg. Co.
Ess Instr. Co.

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Farnsworth Electronics
Farrand Optical
Feedback Controls
Ferranti Electric
Ferrara, Inc.
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Flow-Actuated Control
Foxboro Co.
Franklin Electronics
Fuller Co.
Furnas Electric

Gates Electronic Co.
GE, Apparatus Sales
GE Gen. Purp. Contr.
GE, Specialty Contrls.
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Hammarlund Mfg.
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Heller Co., Gerald
Henschel Corp.
Heese-Eastern
Hewson Co.

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Indust. Gauges Co.
Indust. Electronics Engrs.
Indust. Nucleonics Corp.
Industrial Control Co.
Industrial Electronics
Infilco
Insco Company
Instrument Devel. Labs.
Instruments Inc.
Inst. Corp of Fla.
Intelex Systems
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Internat. Res. & Dev.
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Jarco Services, Inc.
Johnson Service Co.
Jordan Co.
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Kahn & Co.
Kaiser Aircraft & Elect.
Kearfott Co., Inc.
Keckly Co., O. C.
Kirkland Co., H. R.
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Lessells & Assocs.
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Lucian Labs.
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Magnetic Amplifiers
Magnetic Controls
Magnetic Instr. Co.
Magnetic Res. Corp.
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Mercoid Corp.
Metrolog Corp.
Midwestern Instruments
Milton Roy Co.
Mid-Century Instrumatics
Minneapolis-Honeywell
  Boston Div.
  Indust. Div.

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Narda Ultrasonic
National Co.
National Controls
National Instrs. Labs.
Navigation Computer
Nelson Electric Mfg.
Nelson Instr. Co.
Newton Co.
Norden-Ketay
Northeastern Engrg
Norwood Controls
Nuclear Research Corp.
Nuclear Devel. Corp.
Nuclear Corp. of Amer.

Ohmart Corp.
Oil Well Water Loc. Co.
Opad Electric Co.
Optimized Devices

Packard-Bell Electronics
Panellit, Inc.
Parsons Co., Ralph M
Partlow Corp.
Peerless Equip. Co
Penn Insts. Div.
Peschel Electronics
Philco Corp.
Phila. Gear Works
Phoenix Prec. Instr
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Photo-Crystals, Inc.
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Potter Aeronautical
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Ramsey Engrg. Co
Ransom Research
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Reflectone Corp.
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Servo-Tek Products
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Sheffield Corp.
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Teller Co.
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Teller Co.
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Texas App. Co.
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Thermo Electric Co.
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Vapor Recovery Sys. Co.
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Viking Insts., Inc.
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WacLine, Inc.
Waldorf Instr. Co.
Walkirt Co.
Wallson Associates
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Warner Elect. Brake
Warner & Swasey Res.
Warren Mfg. Co.
Warrick Co., Charles F.
Webb Co., Jervis B.
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Western Gear Corp.
Westinghouse Electric
West Instr.
Weston Instr.
Whellco, Div.
Wiancko Engrg. Co.
Wolfe & Mann
Worner Electronic Devices

Zenith Electric

CONTROL SYSTEMS, General-purpose, Electromechanical, for Process Control (see also the Object of Control)

Abrams Instr. Corp.
Aero Elex (Chicago)
Airborne Accessories
Alabama Automation Corp.
All-Tronics, Inc.
Amer. Electronic Labs.
Amer. Kloeckner-Moeller
Amer. Meas. & Control, Inc
Amer. Meter Co.
Analogue Controls, Inc.
Applied Science Corp.
Arma Div.
Arnoux Corp.
Askania Regulator
Askania-Werke, A. G.
Assembly Products
Astra Tech. Inst. Corp
Austin Co.
Auto Control Labs.
Autom. Control Co.
Autom. Timing & Controls
Automation, Inc.
Automation Corp. of Amer.
Automation Management
Automation Prods., Inc.
Autron Engrg., Inc.
Avion Div.
B-I-F Industries
B/W Controller
Baldwin-Lima-Hamilton
Barber-Colman
Barnes, Co., W. F. & John
Bendix, Pacific
Beckman Insts. Div.
Belock Inst.
Bernco Engrg. Corp.
Bowmar Instr. Corp
Brooks Rotameter
Bristol Co.
Bush Assocs.
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Cincinnati Time Rec. Co
Clark Controller Co.
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Cleveland Instrument
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Control Panel Corp.
Control Specialists
Control Specialty Corp.
Cook Electric
Cooper Co., Clark
Counter & Controls Corp.
Crescent Engrg. & Res.
Cutler-Hammer
Curtiss-Wright
Damol Corp.
Datascon Inc.
Datex Corp.
Daystrom Systems
Defender Instr. & Reg.
De-Tec-Tronic Corp.
Devco Engrg.
DuBois Engrg. & Mfg.
DuMont Labs., Allen B.
Dynamics Res. Assoc.
Dynametrics Corp.
Eagle Signal Corp.
Edison, Thomas A.
Electro-Mecahnical Dev. Co.
Electro-Mech. Div.
Electro Devices, Inc.
Electro Precision
Electronic Spec. Co.
Electronic Control Sys.
Energy Kontrols, Inc.
Engrg. & Res. Corp.
Erdco Engrg. Co.
Fairbanks, Morse
Farnsworth Electronics
Feedback Controls
Ferranti Electric
Fischer & Porter Co.
Flow-Actuated Controls
Foxboro Co.
Fulton-Sylphon
Gap Instr. Corp.
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Guardite, Co.
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Hammarlund Mfg.
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Helipot Div.
Hesse-Eastern
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Ideal-Aerosmith
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Indust. Gauges Corp.
Industrial Control Co.
Industrial Elect. Engrg.
Industrial Electronics
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Indust. Nucleonics Corp.
Infilco
Insco Company
Instrument Devel. Labs.
Internat. Res. & Dev.
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Jarco Services, Inc.
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Kearfott Co., Inc.
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Larson Instr. Co.
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Magnetic Research Corp.
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Metrolog Corp.
Mid-Century Instrumatic
Microloc Corp
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Minneapolis-Honeywell
  Boston Div.
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National Co.
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Newton Co.
Norden-Ketay
North Electric
Norwood Controls
Nuclear Corp. of Amer
Opad Electric Co
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Partlow Corp.
Penn Insts. Co.
Phila. Gear Works
Phoenix Precision Inst
Photobell Co.
Photo-Crystals, Inc
Photographic Products, Inc.
Potter Aeronautical
Precision Therm. & Inst.
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Ramapo Instr. Co.
Ramsey Engrg. Co.
Reeves Instr. Corp
Reflectone Corp.
Reliance Instr. Mfg.
Research, Inc.
Reynolds Electric
Robertshaw-Fulton
Sanders Associates
Scaico Controls
Scientific Instr. Co.
Security Controls
Servo Corp. of Amer.
Servo-Tek Prods
Servomechanisms, Inc
Servonic Instrs., Inc.
Shallcross Controls
Simmonds Aerocessories
Simplex Valve & Meter
Soroban Engrg.
Southwestern Ind. Elec
Sterling Prec., Inst. Div.
Suffolk Prods. Co.
Swanson Engrg. Co
Sweets Co., Martin
Taft Peirce Mfg. Co
Taller & Cooper, Inc.
Tammen & Denison
Taylor Electric
Taylor Instr. Cos.
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Technitrol Engrg
Tensitron, Inc.
Texas App. Co.
Thayer Scale & Engrg.
Thompson-Ramo
Transistor Devices
Transval Engrg. Corp.
Trerice Co., H. O.
Triner Scale & Mfg.
Trott Electronics
United Elect. Cont.
United Engineers
United Hydraulics
Universal Match
Vacuum Tube Prods.
Vapor Recovery Systems
Vectron, Inc.
Vickers, Inc.
Viking Instruments
Voltron Products
WacLine Inc.
Waldorf Instr. Co.
Wallace & Tiernan
Wallson Associates
Wang Laboratories Inc
Warner & Swasey Res.
Warner Elect. Brake
Webb Co., Jervis B
Western Gear Corp.
Western Design &
  Mfg. Corp.
Weston Instruments
Wheelco Div.
Wolfe & Mann
Zenith Electric

CONTROL SYSTEMS, Machine Tool, see Machine Tool Controllers

CONTROL SYSTEMS Components, see Circuits and Components, Plug-in

CONTROL VALVES, see Valves

CONTROLS, see Controllers

CONTROLLERS, see Object of Measurement and Control. For example, for Flow Controller, see Flow.

CONTROLLERS, Air, see Pressure Regulators, Air

CONTROLLERS, Beater, see Consistency Regulators

CONTROLLERS, Bin, see Level

CONTROLLERS, Condensation, see Boiler Room Instruments

CONTROLLERS, Condenser Leakage, see Boiler Room Instruments

CONTROLLERS, Damper, see Boiler Room Instruments

CONTROLLERS, Desuperheat, see Boiler Room Instruments

CONTROLLERS, Draft, see Boiler Room Instruments

CONTROLLERS, Feed Water, see Boiler Room Instruments

CONTROLLERS, Filter Rate, see Water Works Instruments

CONTROLLERS, Furnace, see Combustion Control, also Furnace Control

CONTROLLERS, Gas Density, see Density

CONTROLLERS, Light, see Illumination

CONTROLLERS, Manual, Field

Allis-Chalmers
Automatic Electric
Betts & Betts
Black, Sivalls & Bryson
Bristol Co.
Clark Controller Co.
Climax Div.
Cutler-Hammer
Dahl & Co., G. W.
Dormitzer Electric
Fischer & Porter Co.
General Controls
G E. Apparatus Sales
Heller Co., Gerald
Kieley & Mueller
Magnetic Instr. Co.
Manning, Maxwell & Moore
National Elect. Controller
Ohmite Mfg. Co.
Square D Co.
Swartwout Co.
Superdraulic Corp.
Taylor Instr. Cos.
United Hydraulics
Ward Leonard
Westinghouse Electric

CONTROLLERS, Manual, Hydraulic Output

Askania Reg. Co.
Askania-Werke, A. G
Autoclave Engrs.
B-I-F Industries
Barksdale Valves
Bell Aircraft Corp.
Blue M Electric
Bristol Co.
Brooks Rotameter
CDC Controls Services
Cash Co., A. W.
Cook Electric
Cooper Co., Clark
Dahl & Co., G. W.
Defender Instr. & Reg.
Denison Engrg. Co.
General Controls
Genl. Regulator Corp
Hagan Chem. & Controls
Hammel-Dahl
Heese-Eastern
Hydraulic Controls
Infilco
Manning, Maxwell & Moore
Milton Roy Co.
Minneapolis-Honeywell
Phila. Gear Works
Republic Flow Meters
Ribble Engrg. Co.
Rivette Lathe & Grinder
Sanders Associates
Schade Valve Mfg.
Seely Instr. Co.
Shallcross Controls
Simplex Valve & Meter
Superdraulic Corp.
Trimount Instr. Co.
Vickers Inc.
Waterman Engrg. Co.
Weston Hydraulics

CONTROLLERS, Manual, Electric Motor Operated

Allen-Bradley
Allis-Chalmers
Amer. Kloeckner-Moeller
Automatic Elect. Mfg.
B-I-F Industries
B/W Controller
Bernco Engrg. Corp
Betts & Betts
Bogue Electric Mfg.
Bristol Co.
Cardwell Mfg. Corp.
Clark Controller Co.
Cleveland Controls
Cutler-Hammer
Cook Electric
Defender Instr. & Reg.
E-T-A-Products
Electric Switch Corp.
Electronic & Engrg. Serv.
Fasco Industries, Inc.
Fisher Governor
Furnas Electric
General Controls Co.
GE, Apparatus Sales
Genl. Regulator Corp.
Hays Corp.
Heller Co.
Heese-Eastern
Johnson Service Co.
Keckley Co., O. C.
Lapp Insulator
Leeds & Northrup
Mag Elect. Prods.
Magnetic Amplifiers, Inc.
Magnetic Industries
Magnetic Instr. Co.
Maxson Instrument Div.
Minneapolis-Honeywell
National Controls
National Elect. Contr. Co.
Ohmite Mfg. Co.
Opad Electric
Paragon Electric
Phila. Gear Works
Raytheon Mfg.
Reliance Instr. Mfg
Revco, Inc.
Scientific Instr. Co.
Servospeed Div.
Shallcross Controls
Simplex Valve & Meter
Square D Co.
Superior Electric
Teleflex, Inc.
Topp Industries
Trerice Co.
Trimount Instr. Co
United Hydraulics
Ward Leonard
Westinghouse Electric
Wilson & Co.
Zenith Electric

CONTROLLERS, Manual, Pneumatic Output, including Manual/Auto Transfer Stations

AiResearch Mfg.
Amer. Meter Co.
Autom. Switch
B-I-F Industries
Bailey Meter Co.
Barksdale Valves
Barton Instr.
Black, Sivalls & Bryson
Bristol Co.
Brooks Rotameter
Climax Div.
Conoflow Corp.
Cutler-Hammer
Dahl Co., Inc., G. W.
Fischer & Porter Co.
Fisher Governor
Foxboro Co.
GE Apparatus Sales
General Controls Co.
Gen. Regulator Corp.
Hagan Chem. & Controls
Hesse Eastern
Ideal-Aerosmith, Inc
Infilco
Johnson Service Co.
Leeds & Northrup
Leslie Co.
Manning, Maxwell & Moore
Mason-Neilan Div.
Minneapolis-Honeywell
Moore Products
Natl. Pneumatic Co.
Panellit, Inc.
Penn Insts. Div.
Phila. Gear Works
Powers Reg. Co.
Republic Flow Meters
Research Control Instr.
Ross Operating Valve Co
Scientific Instr. Co.
Shand & Jurs
Simplex Valve & Meter
Stratos Div.
Swartwout Co.
Taft-Peirce Mfg. Co.
Taylor Instr. Cos.
Westinghouse Air Brake
Zenith Elect. Co.

CONTROLLERS, Manual, Rheostatic

Accessory Prods.
AiResearch Mfg. Co
Allen-Bradley
Beck Bros.
Bogue Electric Mfg.
Bristol Co.
Centralab Div.
Clark Controller Co.
Cutler-Hammer
Electric Switch Corp.
Electronic & Engrg. Serv.
General Controls Co.
GE, Apparatus Sales
General Radio
General Reg. Corp.
Heller Co.
Heese-Eastern
Mallory & Co., P. R.
National Elect. Controller
Ohmite Mfg.
Phila. Gear Works
Rubicon Co.
United Optical
Ward Leonard
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CONTROLLERS, Moisture, see Humidity

CONTROLLERS, Polymerization, see Control Systems, Process; also Flow; also Temperature; etc.

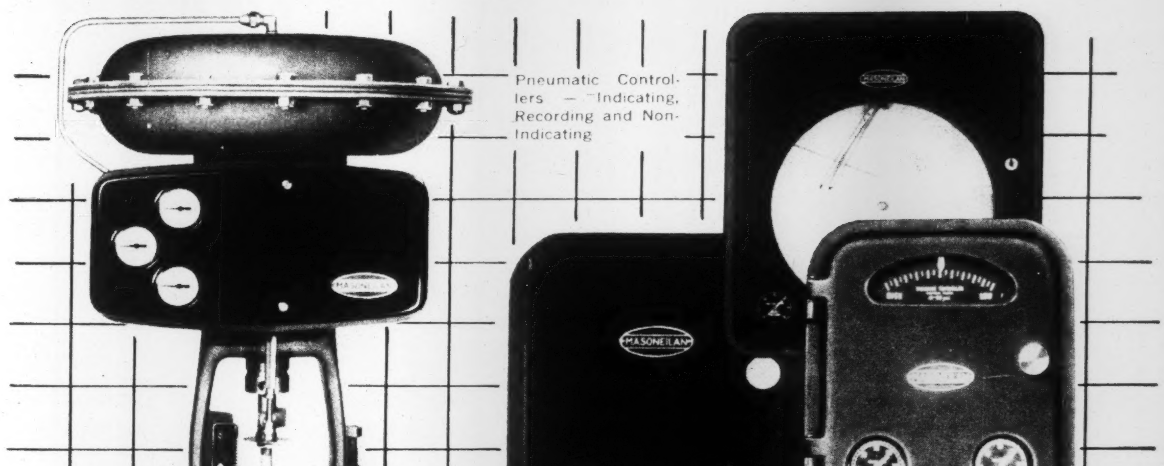
CONTROLLERS, Power Factor, see Power Factor, also Electric Power Instruments

CONTROLLERS, Pyrometric, see Temperature Controllers

CONTROLLERS, Radio Remote, see Telemetering, also Pressure Transmitter, etc.

CONTROLLERS, Rate-Volume, see Flow

CONTROLLERS, RKVA, see Electric Power Generation Instruments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Control Valves — including Valve Positioners and Valve Mounted Controllers
Liquid Level Controllers
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SEVENTY FIFTH ANNIVERSARY

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JOHNSON PNEUMATIC CONTROL

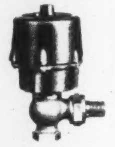
For Processing • Heating • Cooling Humidifying • Dehumidifying Ventilating • Air Conditioning

PROCESS CONTROL. Automatic temperature and humidity control for a wide range of manufacturing and industrial process applications. Thermostats, special controllers, valves and dampers applied to tanks, dryers, vats, kettles, curing rooms, coolers, kilns, ovens and other processing equipment.

SPACE CONTROL. Automatic control of room temperature and humidities applied to radiators, radiant heating, unit ventilators, unit heaters and heat delivery ducts. Johnson equipment includes a complete line of thermostats, thermometers, pressure regulators, humidostats, humidifiers, valves, dampers, damper operators, switches, special controllers and related apparatus.

NATIONWIDE SERVICE. Johnson's own full time engineers and installation men are available at branch offices across the nation. Whether your problem involves a complete system or merely a single controller, take advantage of Johnson's over 73 years' experience in solving all types of control problems.

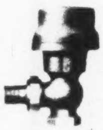
DIAPHRAGM VALVES FOR STEAM AND LIQUIDS



V-153 Sylphon Diaphragm Valve for low pressure steam. Sizes ½" and ¾". *Send for Bulletin V-153.*

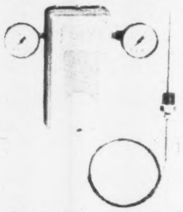
V-103 N.O. Globe-Valve. ½" to 8" sizes. *Send for Bulletin V-103.*

3-Way Valves for mixing and by-pass applications. 100% tight-closing design. Can be serviced without removal from line. Sizes 2½" to 6". 125 and 250 lb. standard construction. *Send for Bulletins V-211 (By-Pass) and V-214 (Mixing).*

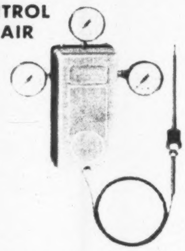


V-111 Sylphon Radiator Valve for low pressure steam. Sizes ½" to 2". *Send for Bulletin V-111.*

MASTER-SUBMASTER CONTROL FOR STEAM, LIQUIDS OR AIR



T-900 Remote Bulb Master Thermostat. *Send for Bulletin T-900.*



T-901 Remote Bulb Submaster Thermostat. *Send for Bulletin T-901.*

PISTON OPERATORS, PILOT POSITIONERS

D-251 Long-Stroke Piston Operator.

Pilot Positioner Applied to Piston Damper Operator.

Piston Operators for dampers and similar uses. Compact with fully enclosed spring and rubber diaphragm. Adjustable stops. Available with pilot positioner for applications requiring maximum and precise repositioning power. *Send for Bulletins D-251 and D-265.*

V-530 Precision Pilot Positioner. Powerful, precise! Responds to slightest change in air pressure. Acts 6 times faster than ordinary pilots. Consumes no more air than a room thermostat. *Send for Bulletin V-530.*

V-530 Precision Pilot Positioner applied to valve.

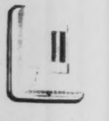
RECORDING AND INDICATING CONTROLLERS FOR TEMPERATURE, PRESSURE, HUMIDITY

T-1000 Record-O-Stat. Records and controls. Built for extreme accuracy under all conditions. Single and two-pen models. Liquid-filled, vapor tension or gas-filled thermal systems. For ranges between minus 125 F and plus 1000 F. Charts for 24 hours or 7 days. *Send for Bulletin T-1000.*

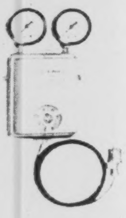
R-1051 Static Pressure Indicator-Controller. Controls at a pressure range as low as 0 to 0.2 in. of water. Extremely accurate for either static or differential pressure control. *Send for Bulletin R-1051.*

THERMOSTATS

T-103 Single Temperature Room Thermostat. *Send for Bulletin T-403.*



T-432 Heating-Cooling Room Thermostat. *Send for Bulletin T-432.*



Series T-800 Thermostats for steam, liquids or air. Proportional or two-position action. Furnished with remote bulb for liquids or air; rigid stem models for insertion or immersion. Separable sockets available. *Send for Bulletin T-800*

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For more information circle **81** on inquiry card.

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CONTROLS, see Controllers

CONVERTERS, see Transducers, also Pickups

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Airpax Prods. Co.
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Amer. Mach. & Foundry
Amer. Telev. & Radio
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Arnoux Corp
Automatic Electric
Autom. Timing & Controls
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Calmag Div
Carter Motor Co.
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Clark Controller
Consolidated Avionics
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Electronic Spec. Co.
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Electronic Measurements Co
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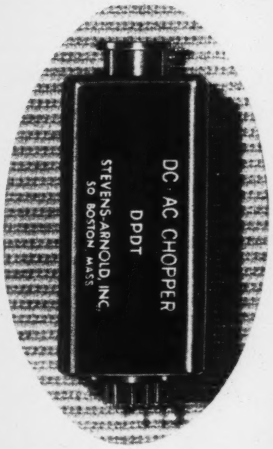
Indust. Test Equipt. Co
Instrument Corp
Instrument Devel. Labs
Interelectronics Corp
International Rectifier
Janette Mfg. Co.
Kato Engrg.
Kearfott Co
Kellogg Switchboard
Kepco Labs
LaMarche Mfg. Co
Lear, Inc
Magnetic Amplifiers
Magnetic Controls
Magnetic Instr. Co
Mallory & Co., P. R.
Maxson Instr. Div
McColpin Christie Corp
Model Rectifier
Motordyne, Inc
NJE Corp
Nader Mfg. Co.
Natl. Aircraft Corp
Newark Electric Co.
Non-Linear Systems
North Atlantic Indust
Opad Electric
Perkin Engrg. Co
Potter Aeronaut. Corp
Power Sources
Power Supplies
Radionics, Inc
Raytheon Mfg. Co
Reliance Elec. & Engrg
Rheem Mfg. Co.
Sangamo Electric
Servo-Tek Prods.
Small Motors, Inc.
Sorensen & Co.
Syntron Co.
Systron Corp.
Technical App. Builders
Universal Transistor
Varo Mfg. Co.
Waldorf Instr. Co.
Walker Div
Wallson Associates
Ward Leonard Elect. Co
Western Design & Mfg. Corp.
Western Gear Corp
Westinghouse Electric
Weston Instr.

CONVERTERS, Analog-to-Digital

Adage, Inc.
Aero Electronics
Airflyte Elec. Co.
Amer. Mach. & Foundry
Applied Science Corp
Assembly Products
Auerbach Electronics
Autonetic Div
Avion Div
BJ Electronics
Bailey Meter Co
Baird-Atomic
Barnes Engrg. Co.
Beckman Div
Bendix, Eclipse-Pioneer
Bendix-Pacific
Benson-Lehner Corp
Berkeley Div.
Bristol Co.
Cal-Ohm Labs
Clifton Precision Prod
Coleman Engrg. Co
Commercial Res. Div.
Computer Control Co
Computer Insts. Corp
Computer Measurements
Consolidated Avionics
Consolidated Controls Corp
Consol. Electrodynamics
Control Data Corp
Cooper Dev. Corp
Cubic Corp.
Datex Corp
Datran Electronics
Daven Co.
Davies Labs. Div
Daystrom Systems
Dayton Instr., Inc
Detroit Contls., Mil. Prod
Dymec, Inc.
Dynametrics Corp
Dynapar Corp
Electro Insts., Inc.
Electro-Mec Laboratory
Electro-Mechanical Res
Electro Precision
Electronic Assocs., Inc.
Electronic Communications
Electronic Engrg. Co
Electronics Corp. of Amer.
Endevco Corp
Engrg. & Res. Corp
Epsco, Inc.
Erie Instrumation
Fairbanks, Morse
Fed. Telephone & Radio
Ferranti Electric
Fischer & Porter
Ford Instr. Co.
Franklin Electronics
Genisco, Inc.
Giannini & Co
Gilmore Industries
Gulton Industries
Gurley, W. & L. E.
Hanson-Gorrill-Brain
Harvey-Wells Electronics
Hewlett-Packard
Hoover Electronics Co.
Hycon Electronics
Indust. Electronic Engrs
Industrial Control Co.
Instrument Devel. Labs
Jackson Co., Byron
Julie Res. Labs.
Kearfott Co
Kintel
Librascope, Inc.
MacLeod & Hanopol
Magnavox Co
Mid-Century Instrumatic
Nankervis Co., Geo. L.
Natl. Aircraft Corp
National Co
Non-Linear Systems
Norden-Ketay
~~Northam Electronics~~
Norwood Controls
Packard-Bell Electronics
Potter Aeronautical
Potter Instr. Co.
Radiation Inc.
Ransom Research
Reeves Instr. Corp.
Remington Rand Univac
Southwestern Ind. Elec.
Streeter-Amet
Stromberg-Carlson
Systems Div. Beckman
Systron Corp.
Taller & Cooper
Tally Register
Telecomputing Corp.
Texas Instrs., Inc
Thompson-Ramo
Waldorf Instr. Co.
Wang Labs., Inc.
Wayne-George Corp
Wiancko Engrg. Co.

CONVERTERS, Binary-to-Decimal

Adage, Inc.
Airflyte Electronics
Auerbach Electronics
Bendix Aviation, Pacific
Berkeley Div.
Cal-Ohm Labs.
Clary Corp.
Computer Control Co.
Computer Measurements
Consolidated Avionics
Consol. Electrodynamics
Control Data Corp
Datex Corp
Datran Electronics
Daystrom Systems
Digital Equipment
Digitronics Corp.
Dymec, Inc.
Electro Insts., Inc.
Electronic Associates
Electronic Engrg. Co
Epsco, Inc.
Erie Instrumentation
Fischer & Porter Co
Franklin Electronics
Giannini & Co.
Harvey-Wells Electronics
Indust. Electronic Engrs.
Julie Res. Labs.
Kearfott Co.
Kintel
Librascope, Inc.
Monroe Calc. Mach. Co
Natl. Aircraft Corp.
National Co
Navigation Computer
Neutronics Research
Non-Linear Systems
Norden-Ketay Corp
Northeastern Engrg.
Orbitran Co.
Potter Instr. Co.
Radiation Inc.
Ransom Research



DC-AC CHOPPERS

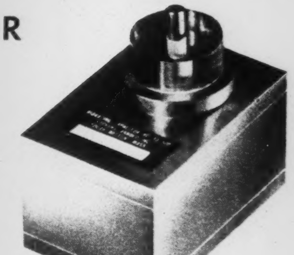
For 50, 60, 94, 120 Cycle Use

There are twenty-two miniature types, both single and double pole, built to rigid commercial specifications with the emphasis on long life, low noise level, and extreme reliability. Please write for Catalog 515.

MICROVOLT MODULATORS

VIBRATING CAPACITOR

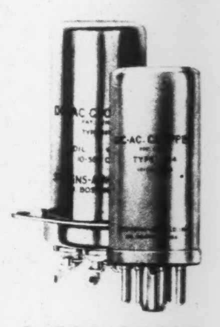
A vibrating-reed type capacitance modulator used to measure currents as low as 10^{-16} amperes. Drift never exceeds ±0.2 millivolts per day, noncumulative. Thus it is ideal where stable performance without recalibration is required for periods of a month or more. Write for Catalog 523.



MILLISEC
PATENT PEN
STEVENS ARNO
SOUTH BOSTON

ULTRA HIGH SPEED RELAYS

Operating time 200 microseconds. Mount in any position. Will cover the range of −65°C to +85°C factory sealed. Please write for Catalog 337.



0-500 CYCLE DC-AC CHOPPERS

Liberal factors of safety. Before any Chopper is shipped, it is tested twice over the range of −65°C to +85°C to give double proof of stamina. Please write for Catalog 280.

RESONANT
PATENT PEN
STEVENS ARN
SOUTH BOSTON

RESONANT RELAYS

Permit remote control by radio or carrier through frequency discrimination. Relays operate only when energized at rated frequencies and reject all others. Please write for Catalog 335.

STEVENS-ARNOLD
INCORPORATED

7 ELKINS STREET, SOUTH BOSTON 27, MASS.

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Stromberg-Carlson
Southwestern Ind. Elec.
Systems Div., Beckman
Systron Corp.
Taller & Cooper
Telemeter Magnetics, Inc.
Transistor Applications
Waldorf Instr. Co.
Wang Labs.

CONVERTERS, DC to AC, including Magnetic and Transistorized

Adler Electronics
Aerovox Corp.
Airborne Accessories
Airpax Products
Amer. Electronics
American-Monarch
Arnoux Corp.
Avion Div.
Bogue Elect. Mfg.
Bristol Co.
Brit. Electronic Sales Co.
Calif. Magnetic Cont. Corp.
Calmag Div.
Carter Motor Co.
Communication Access.
Daven Co.
Davenport Mfg.
Dynamics Res. Assoc.
Electro Engrg. Prod. Co.
Electronic Measurements
GE, Apparatus Sales
GE, Low Volt Switchgr.
General Magnetics
Hall-Scott, Inc.
Harvey-Wells Electronics
Inet-Palmer Div.
Interelectronics Corp.
Kato Engrg.
Kenyon Transformer
Leland Electric
Magnetic Amplifiers
Magnetic Instr. Co.
Magnetic Research Corp.
Metrolog Corp.
Minneapolis-Honeywell
  Boston Div.
Motordyne, Inc.
Natl. Aircraft Corp.
North Hills Electric
Opad Electric Co.
Perkin Engrg. Co.
Pioneer Magnetics
Power Sources
Power Supplies
Rheem Mfg. Co.
Southwestern Ind. Elec.
Stator Electric
Technical App. Builders
Timely Instrs. & Conts.
Torwico Electronics
Transval Engrg. Corp.
Transistor Applications
Universal Transistor
Varo Mfg.
Wang Labs.
Warren Mfg.
Western Design & Mfg.
Western Gear Corp.
Weston Instruments

CONVERTERS, Digital-to-Analog

Adage, Inc.
Airflyte Electronics
Amer. Mach. & Foundry
Applied Science Corp.
Auerbach Electronics
Avion Div.
Barnes Engrg. Co.
Baird-Atomic
Beckman Div.
Bendix-Pacific
Benson-Lehner Corp.
Berkeley Div.
Bristol Co.
Cal-Ohm Labs.
Coleman Engrg. Co.
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Consolidated Avionics
Control Data Corp.
Datex Corp.
Datran Electronics
Daven Co.
Daystrom Systems
Dymec, Inc.
Electro Instrs., Inc.
Electronic Assocs., Inc.
Electronic Communication
Electronic Engrg. Co.
Engrg. & Res. Corp.
Epsco, Inc.
Erie Instrumentation
Ferranti Electric
Ford Instr. Co.
General Prec. Lab.
Genisco Inc.
Giannini & Co.
Gilmore Industries
Harvey-Wells Electronics
Hewlett-Packard
Hoover Electronics
Industrial Control
Indust. Electronic Engrs.
Julie Res. Labs.
Kearfott Co.
Kin Tel
Librascope, Burbank Div.
Mid-Century Instrumatic
Monroe Calc. Mach. Co.
Natl. Aircraft Corp.
National Co.
Navigation Computer
Neutronics Research
Non-Linear Systems
Norden-Ketay
Owen Labs., Inc.
Packard-Bell Electronics
Pioneer Magnetics
Potter Aeronautical
Potter Instr. Co.
Radiation Inc.
Ransom Research
Reeves Instr. Corp.
Southwestern Ind. Elec.
Stromberg-Carlson

Systems Div., Beckman
Systron Corp.
Taller & Cooper
Thompson Ramo
Transistor Applications
United Electrodynamics
Waldorf Instr.
Wang Labs.
Waugh Engrg. Co.
Weston Instruments
Wiancko Engrg. Co.

CONVERTERS, Electric-to-Hydraulic

Amer. Measurement & Cont.
Bell Aircraft Corp.
Bendix Aviation Corp.
Bristol Co.
Engrg. & Res. Corp.
Hagan Chem. & Controls
Kearfott Co., Inc.
Manning, Maxwell & Moore
Muirhead Instrument
Natl. Aircraft Corp.
Potter Aeronautical
Sanders Associates
Transistor Applications
Vickers, Inc.
Western Design &
  Mfg. Corp.

CONVERTERS, Electric-to-Pneumatic

Amer. Measurement & Cont.
Bristol Co.
Fischer & Porter Co.
Foxboro Corp.
Hagan Chem. & Controls
Johnson Service Co.
Leeds & Northrup
Manning, Maxwell & Moore
Potter Aeronautical
Potter Instr. Co.
Swartwout Co.
Taylor Instr. Cos.
Transistor Applications
Western Design &
  Mfg. Corp.

CONVERTERS, Frequency

Airpax Products
Amerac, Inc.
Amer. Electronics
Amer. Elect. Motors
Amer. Mach. & Foundry
Auerbach Electronics
Automatic Electric
Bendix, Red Bank Div.
Berkeley Div.
Bogue Electric Mfg.
Boonton Radio
Bristol Co.
Bunnell Co., J. H.
Burke Electric
Carter Motor Co.
Consolidated Avionics
Cooper Dev. Corp.
Daven Co.
D & R Ltd.
Datascan Inc.
Dynamics Res. Assoc.
Eicor, Inc.
Elec. Motors & Specialties
Electric Spec. Co.
Electro-Voice, Inc.
Epsco, Inc.
Fischer & Porter
GE, Apparatus Sales
GE Low Volt Switchgr.
I-L-S Instr. Corp.
Indust. Test Equip.
Inet-Palmer Div.
Instr. Devel. & Mfg.
Jack Scient. Instr. Co., Bill
Kato Engrg.
Magnetic Instr. Co.
Measurements Corp.
Metrolog Corp.
Nankervis Co.
Natl. Aircraft Corp.
National Co.
Opad Electric Co.
P & H Electronics
Perkin Engrg. Co.
Philamon Labs.
Pioneer Magnetics
Potter Aeronaut. Co.
Potter Instr. Co.
Power Sources
Radio Frequency Labs.
Riverbank Labs.
Robbins & Myers
Servo Corp. of Amer.
Sorensen & Co.
Southwestern Ind. Elec.
Stelma, Inc.
Systems Div., Beckman
Systron Corp.
Technical App. Builders
Tech. Material Corp.
Tel-Instr. Electronics
Thordarson-Meissner
Transistor Applications
Trio-Labs., Inc.
Universal Transistor
Varo Mfg. Co.
Vibration Res. Labs.
Voltron Products
Wac Line, Inc.
Walkirt Co.
Walker Div.
Waugh Engrg. Co.
Western Gear Corp.
Westinghouse Electric

CONVERTERS, Punched Card

Austin Co.
Bendix, Computer Div.
Berkeley Div.
Computer Control Co.
Consolidated Avionics
Control Data Corp.
Datex Corp.
Digitronics, Corp.
Dymec, Inc.
Electro Insts., Inc.
Electrol, Inc.
Epsco, Inc.

Kleinschmidt, Inc.
Librascope, Inc.
Librascope, Burbank Div.
Mid-Century Instrumatic
Moseley Co.
Natl. Aircraft Corp.
Non-Linear Systems
North Amer. Instr.
Potter Instr. Co.
Remington-Rand Univac.
Systematics, Inc.
Systron Corp.
Taller & Cooper
Telecomputing Corp.
Tri-Tronics Co.
Ultrasonic Corp.

CONVERTERS, Punched Tape

Austin Co.
Bendix, Computer Div.
Berkeley Div.
Commercial Controls Corp.
Computer Control Co.
Consolidated Avionics
Control Data Corp.
Corbett Science Labs.
Datex Corp.
Daystrom Systems
Digitronics Corp.
Dymec, Inc.
Electro Insts., Inc.
Epsco, Inc.
Ferranti Electric
Fish-Schurman
Librascope, Burbank Div.
Librascope, Inc.
Mid-Century Instrumatic
Moseley Co.
Non-Linear Systems
**Nuclear Devel. Corp. of
  Amer.**
Potter Instr. Co.
Remington Rand
Soroban Engrg.
Systematics Inc.
Systron Corp.
Taller & Cooper
Telecomputing Corp.
Telemeter Magnetics, Inc.
Tri-Tronics Co.
Ultrasonic Corp.

CONVERTERS, Rotary, DC to AC

Barnes Devel. Co.
Bendix, Red Bank Div.
Bogue Electric Mfg.
Carter Motor Co.
Dalmotor Co.
Eicor, Inc.
Gates Electronic Co.
GE, Apparatus Sales
Gothard Mfg.
Inet-Palmer Div.
Interelectronics Corp.
Jack Scient. Instr. Co., Bill
Kato Engrg.
Leland Electric
Magnetic Instr. Co.
Maxson Instruments
Motordyne, Inc.
Sangamo Electric
Siemon Engrg. Co.
Small Motors, Inc.
Summers Gyroscope
Varo Mfg. Co.
Western Design &
  Mfg. Corp.
Western Gear Corp.

CONVERTERS, Vibrator, DC to AC

Airpax Prods. Co.
Amer. Industrial Elect.
Amer. Television & Radio
Applied Science Corp.
Automatic Electric
Avion Div.
Barber-Colman
Barnes Devel. Co.
Bendix, Eclipse-Pioneer
Bristol Co.
Brunswick Instruments
Calif. Magnetic Cont. Corp.
Carter Motor Co.
Cornell-Dubilier
Davenport Mfg.
DuMont Labs., Allen B.
Eicor, Inc.
Electronic Instr. Co.
Electronic Spec. Co.
Gates Electronic Co.
GE
GE, Low Volt Switchgr.
General Radio Co.
Giannini & Co.
Industrial Control Co.
Industrial Test Equipt.
Instr. Devel. & Mfg.
James Vibrapowr Co.
Kurman Electronics
Lafayette Instr. Co.
Leeds & Northrup
Magnetic Instr. Co.
Magnetic Res. Co.
Mallory & Co., P. R.
Menlo Research Lab.
Millivac Instr. Co.
**Minneapolis-Honeywell
  Indust. Div.**
Modern Tech. Supply
Nader Mfg. Co.
Opad Electric Co.
Perkin Engrg.
Power Supplies
Precise Measmts. Co.
Rheem Mfg. Co.
Sangamo Electric
Std. Electric Time
Stevens-Arnold
Transval Engrg. Corp.
Vibration Research Labs
Western Gear Corp.

CORDS, see Cable

CORDS, Patch

Aerolite Electronics
Alden Products

AMP, Inc.
Ampco Mfg. Co.
Amphenol Electronics
Associated Engrg.
Audio Devel. Co.
Automatic Electric
Berkeley Div.
Cal-Ohm Labs.
Carter Parts Co.
Coaxial Connector Co.
Daven Co.
Donner Scientific
General Radio
Instr. Devel. & Mfg.
LR Electronics
Lab-Tronics
Pax Electronics
Phalo Plastics
Precision Mfg. Co.
Reeves Instr. Corp.
Standard Electric
Std. Elect. Time Co.
Stretch Wire
Stromberg-Carlson
Telex, Inc.
Vector Electronic
Virginia Electronics
Waldon Electronics

CORES, Magnetic, see Magnetic Cores

CORROSION TESTERS, see also Environmental Test Instruments

COTTERS, External

Albany Prods. Co.
Amer. Chain Div.
Hunter Spring
Std. Horse Nail

COUNTERS, Alarm

Adde & Co.
Anatran. Engrg. Corp.
Cal-Tronics Corp.
Counter & Control Corp.
Cook Electric
Daystrom Systems
De-Tec-Tronic Corp.
Durant Mfg.
Electrical & Phys. Instr.
El-Tronics, Inc.
Fischer & Porter
Gaydon Co.
GE
General Controls
Lumenite Electronic
Martin-Hubbard
Mercoid Corp.
Metrotype Corp.
Nuclear Research
Peschel Electronics, Inc.
Photobell Co.
Potter Instr. Co.
Production Instr. Co.
Radiation Instr. Devel. Lab.
Ram Meter, Inc.
Rowe Engrg. Co.
Streeter-Amet

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FOR CONTROLS THAT QUALIFY!

MINIATURE
MAGNETIC
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ABRAMS
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LANSING, MICHIGAN U.S.A.
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CONFORMANCE TO ALL MILITARY SPECIFICATIONS
HERMETIC SEALING SHOCK MOUNTING

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606 E. SHIAWASSEE ST.
LANSING, MICHIGAN

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PRESET COUNTER
By FREED

The Freed Model 2020 Preset Counter is designed for low cost reliable counting applications, where accuracy and maintenance-free operation is required.

Cold cathode counting and trigger tubes, with simplified circuits, are used throughout which assure years of trouble-free counting service and low-power consumption.

Model 2020 is a 4-digit single preset counter capable of controlling any operation that is repeated up to 9,999 times. Any number from 1 to 9,999 may be preset on the 4-digit selector switches. When the preset total has been reached, the counter will provide an output pulse and close contacts on a relay. These outputs may be used simultaneously or separately to stop machines, actuate control signals, or trigger additional equipment.

SPECIFICATIONS

Maximum Count: Four digits — 9,999
Maximum Counting Rate: 300,000 counts per minute
Input Sensitivity and Waveform: Not critical
Outputs: Relay contact 10 Amperes; Pulse output 50 volts
Size: 8 x 6 x 12 inches
Weight: 11 pounds
Power: 25 watts, 105-125 volts, 50-60 cycles
Price: $425.00

FREED ALSO MANUFACTURES TOTALIZING, PRESET, AND BATCHING COUNTERS

SEND FOR COMPLETE INFORMATION
FREED TRANSFORMER CO., INC.
1714 Weirfield Street
Brooklyn (Ridgewood) 27, N. Y.

For more information circle **84** on inquiry card.

Systron Corp.
Victoreen Instr.
Veeder-Root
Western Radiation Lab.

COUNTERS, Batch, see Counters, Predetermined

COUNTERS, Binary

Assembly Products, Inc
Auerbach Electronics
Baird Atomic
Beckman Div.
Burroughs Electronics
Computer Control Co
Computer Counter Co
Computer Measmnts. Corp
Consolidated Avionic
Daystrom Instrument
Daystrom Systems
Detectolab Inc
Digital Equipment
Durant Mfg. Co
Dymec Inc
Elcor, Inc
Electrol Inc
Electronic Associates
Electronic Engrg. Co.
Engineered Electronics
Epsco, Inc
General Controls Co
Hamner Electronics
Harvey Wells Electronics
Hycon Electronics
I-L-S Instr. Corp.
Kaiser Aircraft & Elect
Kearfott Co., Inc.
Mack Electronics
Magnetics Res. Co
NRD Instr. Co
Navigation Computer
Northeastern Engrg
Nuclear-Chicago
Nuclear Corp. of Amer
Nuclear Electronics
Nucleonic Corp. of Amer.
Potter Aeronautical
Potter Instr. Co
Radiation Counter Labs
Radiation Instr. Devel. Lab
Radionics, Inc
Ransom Research
Taller & Cooper, Inc
Technical Associates
Telemeter Magnetics
Texas Instr., Inc
Tracerlab, Inc
Trott Electronics
Victoreen Instr. Co
Walkirt Co
Wang Labs

COUNTERS, Chart-recording

Alden Electron & Impulse
B-I-F Industries
Baird Atomic
Beckman Div
Bristol Co
Consolidated Avionics
Durant Mfg. Co
Elect. Tachom. Corp.
Electronic Associates
Engler Instr. Co
General Controls
Gorrell & Gorrell
Heat-Timer Corp
Larson Instrument
Northeastern Engrg
Nucleonic Corp. of Amer
Orban Co., Kurt
Packard-Bell Electronics
Potter Aeronautical
Potter Instr. Co.
Radiation Instr. Devel. Lab
Royson Engrg. Co
Streeter-Amet
Taller & Cooper, Inc.
Technicraft Co.
Trott Electronics
Wheelco Div.

COUNTERS, Colony, see Counters, Micro particle

COUNTERS, Decade

Alcor Electronics
Amerac, Inc.
Amer. Tradair Corp.
Anatran Engrg. Corp.
Auerbach Electronics
Auto. Electric Sales
Baird-Atomic
Bendix, Cincinnati Div.
Berkeley Div.
Boulin Instr.
Bowmar Instr. Corp.
Brush Instruments
Burroughs Electronics
Cal-Ohm Labs.
Computer-Measmts. Corp.
Consolidated Avionics
Dayton Instruments
Dectolab, Inc.
Digital Equipment
Dynapar Corp.
Dymec, Inc.
Electro Precision
Electronic Engrg. Co.
Engineered Electronics
Epsco, Inc.
Erie Instrumation
Ferrara, Inc.
Freed Transf. Co.
General Controls Co.
Haydu Brothers
Hewlett-Packard
Hunter Mfg. Co.
I-L-S Instr. Corp.
Indust. Electronic Conts.
Intelex Systems
Jessup Engrg. & Dev.
Kaiser Aircraft & Elect.
Kellogg Switchboard
Lavoie Labs, Inc.
Magnetic Instr. Co
Magnetics Res. Co.
Maxson Instruments
Nader Mfg.
NRD Instr. Co.
Natl. Aircraft Corp.
Navigation Computer
North Amer. Philips
Northeastern Engrg., Inc.
Nuclear Corp. of Amer.
Nuclear Measmts. Corp
Nuclear-Chicago
Nucleonic Corp. of Amer.
Nuclear Electronics
Post Machy. Co.
Potter Aeronaut. Co
Potter Instr. Co.
Radiation Counter Labs.
Radiation Instr. Devel. Lab
Radionics, Inc
Ram Meter, Inc
Ransom Research
Sciaky Bros., Inc
Sigma Instruments
Spellman Television
Systron Corp.
Taller & Cooper
Technical Associates
Telecomputing Corp.
Telemeter Magnetics, Inc
Tracerlab, Inc
Trott Electronics
Veeder-Root
Victoreen Instr. Co
Walkirt Co.
Wang Labs, Inc.

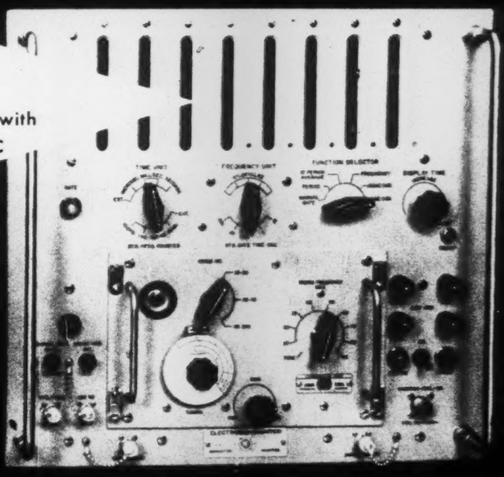
COUNTERS, Electrical Impulse

Abrams Instr. Corp.
Aero-Instr. Co.
Alcor Electronics
Amer. Electroneering
Amer. Electronic Labs.
Amer. Tradair Corp.
Anatran Engrg. Corp.
Auto. Electric Sales
Automatic Electric
Autron Engrg., Inc.
Baird-Atomic
Bendix Aviation Corp.
Boulin Instr.
Bristol Co.
Butler Mfg.
Cal-Ohm Labs.
Cal-Tronics
Cambridge Thermionic
Central Scientific
Cincinnati Time Rec. Co
Coleman Engrg. Co.
Computer Control Co.
Computer-Measmts. Corp.
Consolidated Avionics
Control Corp.
Control Engrg. Co.
Corbett Science Labs.
Counter & Control Corp.
Cyclotron Specialties
Davenport Mfg.
Digitac, Inc.
Digital Equipment
Dittmore & Freimuth
Durant Mfg. Co.
Dymec, Inc
Eagle Signal Corp.
Elect. Tachom. Corp.
Electro Mechanical Dev. Co
Electronic Control Systems
El-Tronics, Inc.
Electro-Tech Equip.
Endevco Corp
Engineering Res. Assocs.
Engr. Research & Devel.
Erie Instrumentation
Fischer & Porter Co.
Freed Transf. Co.
GE
General Controls
Genisco, Inc.
Guardian Electric
Hagen Mfg.
Haledy Electronic
Hamner Electronics.
Haydon Co., H. W.
Haydu Brothers
Heat Timer Corp.
Hewlett-Packard
Hunter Mfg.
Hycon Electronics
Indust. Electronic Conts.
Industrial-Electronics
Jack Scient. Instr. Co., Bill
Jessup Engrg. & Devel.
Kearfott Co.
Landis & Gyr
Lumenite Electronic
Magnetics Res. Co.
Mast Devel.
Maxson Instruments
Mueller Lab.
Nader Mfg.
Nemeth Labs.
Newton Co.
North Electric
Orban Co., Kurt
Peschel Electronics
Photobell Co.
Photocon Research
Pioneer Magnetics
Potter Aeronaut. Co.
Potter Instr. Co.
Power Supplies
Presin Co.
Production Instr. Co.
Radiation Instr. Devel. Lab.
Ram Meter, Inc.
Ransom Research
Raycon Corp.
Remington Rand Univac
Richardson Scale
Royson Engrg. Co.
Sangamo Electric
Std. Elect. Time Co.
Stepper Motors Corp.
Stewart Instr. Co.
Stoelting Co.
Streeter-Amet
Sunshine Scientific
Systron Corp.
Taller & Cooper, Inc.
Taylor-Emmett Controls
Telecomputing Corp.
Thordarson-Meissner

For Frequency Measurement, Counting, Periods, Time Intervals . . .

ELECTRONIC COUNTERS

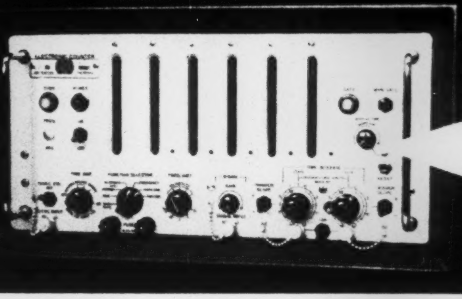
MODEL 14-20A
$1,700
10 cps to 10 MC with Plug-Ins to 220 MC



NEW– Advanced Circuitry

NEW– Mechanical Design.

NEW HIGHS in STABILITY and ACCURACY
Yet at New LOWS in COST !

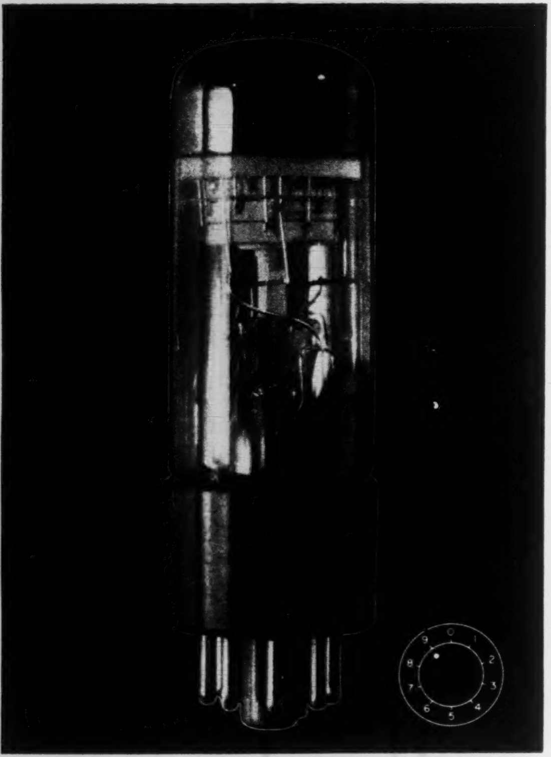


MODEL 13-20
$995
10 cps to 1.1 MC

BOTH MODELS available with optional Transistorized Oscillator: Stability 5 parts in 10^8 per week; and 5 parts in 10^8 per month thereafter; at nominal additional cost.

NORTHEASTERN ENGINEERING, INC.
MANCHESTER, N. H. • 25 So. Bedford St.
P. O. Box 150 • NAtional 2-6485

For more information circle 85 on inquiry card.



Need a **PROVEN** tube that indicates and counts?

dekatron*

The only cold-cathode glow transfer counting tube **WITH OVER 10 YEARS OF SERVICE RELIABILITY AND PERFORMANCE.** Simple circuitry. Electronic speed and accuracy up to 20,000 counts/sec. For counting, sorting, programming, unit flow, packaging and many other applications. Continuous visual reference to total count. For detailed information, request Technical Data Sheet IC4001.

*Trademark

Baird
Atomic

Baird-Atomic, Inc.

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Instrumentation for Better Analysis

For more information circle **86** on inquiry card.

Unimax Switch Div
Univ. Atomics Corp
U. S. Instr. Corp.
Veeder-Root
Victoreen Instr. Co
Walkirt Co.
Wang Labs.
Wiancko Engrg. Co.

COUNTERS, Electronic, including Events per unit-time

ACF Electronics
Abrams Instr. Co.
Acromark
Adde & Co
Aero Instr. Co.
Alcor Electronics
Alina Corp.
Allegany Instr. Co
Amer. Electroneering
Amer. Electronics Labs
Amer. Time Prods.
Amer. Tradair Corp.
Anatran Engrg. Corp.
Austin Co.
Automation Management
Automatic Electric
Autom. Timing & Controls
Autotron Co.
Avion Div.
BJ Electronics
Barbour-Stockwell
Baird-Atomic
Bendix, Cincinnati Div.
Berkeley Div.
Bowmar Instr. Corp.
Bristol Co.
Brush Instruments
Burroughs Electronics
Butler Mfg.
Cal-Ohm Labs.
Cal-Tronics
Cincinnati Time Recorder
Clary Multiplier
Computer Control Co.
Computer-Measmts. Corp
Consolidated **Avionics**
Control Devices, Inc.
Control Engrg. Co.
Cook Electric
Corbett Science Labs.
Counter & Control Corp.
Cramer & Co. Controls Corp.
Cyclotron Specialties
Daytronic Corp.
Daystrom Systems
Detect-O-Ray
Detectron Co.
Devtronics, Inc.
Dittmore & Freimuth
Durant Mfg.
Dymec, Inc.
Dynapar Corp.
Eagle Signal Corp.
Eastern Prec. Resistor
Engineered Electronics
Electric Speed Indic. Co.
Electrical Devel.
Elect. Tachom. Corp.
Electro Insts., Inc.
Electro Precision
Electro-Pulse Inc.
Electronic Controls
Electronic Control Systems
Electronics Corp. of Amer.
Electronic & Engrg. Serv.
Electronic Engrg. Co.
El-Tronics, Inc.
Engineering Res. Assoc.
Erie Instrumentation
Federal Telephone & Radio
Fischer & Porter
Ford Instr. Co.
Foxboro Co.
Freed Transf. Co.
GE, Electronics Div.
GE, Telechron Dept.
Gordon Enterprises
Gorrell & Gorrell
Guardian Electric
Haledy Electronic
Hart Mfg. Co.
Haydon Co., A. W.
Haydu Brothers
Hetherington, Inc.
Hewlett-Packard
Hunter Mfg. Co.
I-L-S Instr. Corp.
Industrial Elect. Controls
Instrument Lab., Inc.
Jessup Engrg. & Devel.
Kay Electric
Kearfott Co.
Krohn-Hite
Landis & Gyr
Larson Instrument
Librascope, Inc.
Little, Inc., Arthur D.
Lumenite Electronic
Magnetics Res. Co.
McDonnell Odometer Co.
Menlo Research Lab.
Moisture Register Co.
Natl. Aircraft Corp.
Nelson Instr. Co.
Norden-Ketay
Northeastern Engrg.
Nuclear-Chicago
Nuclear Corp. of Amer.
Nuclear Electronics
Nuclear Measmts. Corp.
Nuclear Research
Pacific Transducer
Paragon Electric
Penn Insts. Div.
Performance Measmts.
Peschel Electronics
Photobell Co.
Post Machinery Co.
Potter Aeronaut. Co.
Potter Instr. Co.
Power Supplies
Presin Co.
Probescope Co.
Production Instr. Co.
Radiation Insts. Devel. Lab.
Radioactive Prods., Inc.
Ransom Research
Raycon Corp.
Raytheon Mfg.
Redington Co.
Richardson Scale
Rowe Radio Research
Scientific Specialties
Shallcross Mfg.
Special Insts. Lab.
Spivey, Inc., James S
Std. Elect. Time Co
States Co.
Stewart Instr. Co.
Stoelting Co.
Stratex Instr. Co
Streeter-Amet
Struthers Dunn
Sunshine Scientific
Systron Corp.
Taller & Cooper
Technical **Associates**
Telecomputing Corp.
Thordarson-Meissner
Transistor Devices
Trott Electronics
Veeder-Root
Victoreen Instr. Co
Virginia Electronics
Walkirt Co.
Wang Labs.
Westport Electric
Wilson & Co.
Worner Electronic Devices

COUNTERS, Footage

Adde & Co.
Anatran Engrg.
Barbour Stockwell
Bogue Electric Mfg
Bristol Co.
Computer-Measmts. Corp
Cook Electric
Counter & Control Corp.
Dittmore & Freimuth
Durant Mfg.
Electro-Tech Equip.
Elect. Tachom. Corp
Engler Instr. Co.
Freed Transf. Co.
General Controls
G. M. Mfg. Co.
Gordon Enterprises
Haledy Electronic
Hasler-Tel Co.
Hetherington, Inc.
Indust. Nucleonics
Librascope, Burbank Div.
Mast Devel.
Maxson Instruments
McDonnell Odometer Corp
Minneapolis Electric
Newton Co.
Nuclear Devel. Lab.
Nucleonic Corp.
Olympic Instr. Labs.
Perkins & Son, Inc
Post Machy. Co.
Potter Instr. Co.
Production Instr. Co
Richardson Scale
Royson Engrg. Co
Streeter-Amet
Systron Corp.
Veeder-Root
Zernikow Co.

COUNTERS, Geiger-Mueller (see also Radioactivity)

Abrams Instr. Co.
Air-O-Tronics
Alpine Labs. Ltd.
Amer. Instr. Co.
Amer. Tradair Corp.
Amperex Electronic
Anton Electronic Labs
Atomic Instr. Co.
Baird-Atomic
BJ Electronics
Bendix, Eclipse-Pioneer
Bendix, Red Bank Div.
Berkeley Div.
Cambridge Instr. Co
Can. Rad. & Uran.
Corbett Science Labs.
Cornell-Dubilier
Cyclotron Specialties
Daystrom Instr.
Detectolab, Inc.
Detectron Co.
Distillation Products
Douglas Instr. Labs.
Elecro-Mechanical Dev. Co
Electronic & Engrg. Serv.
Electronic Instr. Co.
El-Tronics, Inc.
Fisher Res. Lab.
Forro Scientific Co.
GE, Apparatus Sales
General Radio Co.
Geophysical Instrument
Georator Corp.
Giannini & Co.
Hansen Co., Wm.
Herback & Rademan
Hewlett-Packard
I-L-S Instrument
Instr. Devel. Labs.
Instruments Inc.
Jordan Electronics
Landsverk Electrometer
Leighton Labs., H. W.
Librascope, Inc.
Menlo Research Lab.
Mt. Sopris Instr. Co.
NRD Instr. Co.
North Amer. Philips Co
Nuclear-Chicago
Nuclear Corp. of Amer.
Nuclear Devel. Lab.
Nuclear Electronics
Nuclear Measurements Corp.
Nuclear Research
Nuclear Science & Engrg.
Nucleonic Corp.
Ohmart Corp.
Pacific Transducer
Potter Instr. Co.
Prec. Radiation Insts.
Radiation Counter Labs.
Radiation Instr. Dev. Labs.
Radiation Res. Corp.
Radioactive Prods., Inc.
Radio City Products
Raytheon Mfg.
Servo Corp. of Amer.
Southw. Indust. Electronics
Special Insts. Lab.
Stoelting Co.
Stratex Instr. Co
Streeter-Amet
Sylvania Elect. Prods.
Technical Associates
Technical Measmt. Corp
Thordarson-Meissner
Tracerlab Inc.
Ultra-Violet Prods.
United Engineers
Universal Transistor
Universal X-Ray Prods
Vacutron, Inc.
Victoreen Instr. Co.
Walkirt Co.
Welch-Allyn Inc.
Western Radiation Lab
Wilmar Mfg.
Wood Counter Lab.

COUNTERS, Hour, see Timers

COUNTERS, Mechanical, including Stroke

Acromark Co.
Adde & Co.
Advanced Electronics
Alpine Labs. Ltd.
Amer. Time Prods.
Anatran Engrg. Corp
Atomic Instruments
Autom. Timing & Controls
Autron Engrg., Inc.
Automation Management
Barbour-Stockwell
Berkeley Div.
Borg Equipt. Div.
Bowmar Instr. Corp.
Bristol Co.
Clary Multiplier
Coleman Engrg. Co.
Cook Electric
Counter & Control Corp
Cyclotron Specialties
Dittmore & Freimuth
Durant Mfg.
Eagle Signal Corp.
Electro-Tech Equip.
Elect. Tachom. Corp
Endevco Corp.
Engler Instr.
Engr. Res. & Devel.
Fischer & Porter
Ford Instr. Co.
Gap Instr. Co.
General Controls
Genisco, Inc.
Gordon Enterprises
Gorrell & Gorrell
Guardian Electric
Hagen Mfg.
Haledy Electronic
Hart Mfg. Co.
Hunter Mfg. Co.
Hycon Electronics
Impact Register
Internat. Register Co
Kearfott Co.
Landis & Gyr
Lumenite Electronic
Mast Devel.
McDonnell Odometer Co
Moisture Register Co
Opplem Co.
Orban Co., Kurt
Photocon Research
Potter Instr. Co.
Presin Co.
Production Instr. Co
Ram Meter, Inc.
Raycon Corp.
Remington-Rand Univac
Redington Co.
Richardson Scale
Royson Engrg. Co
Streeter-Amet
Taller & Cooper
Veeder-Root
Walkirt Co.

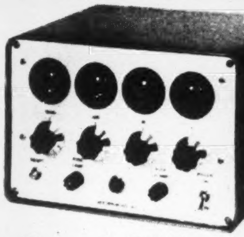
COUNTERS, Microparticle

Amer. Optical
Bush Assoc., G. F.
Central Scientific
Fisher Scientific
Fish-Schurman
Nikon, Inc.
Optionic Research, Inc.
Sargent & Co.

COUNTERS, Photoelectric

ACF Electronics
Alcor Electronics
Alpine Labs. Ltd.
Amer. Electronic Labs
Automation Management
Autotron Co.
Autron **Engrg.**, Inc.
Avion Div.
Baird-Atomic
Basic Controls, Inc.
Berkeley Div.
Cal-Tronics Corp.
Computer-Measmts. Corp
Corbett Science Labs.
Datascan Corp.
Davenport Mfg. Co.
Daytronic Corp.
Detect-O-Ray
De-Tec-Tronic Labs.
Dittmore & Freimuth
Durant Mfg. Co.
Dynapar Corp.
Electronic Controls Corp.
Electronic Prods. Co.
Electronics Corp. of Amer.
Electro-Physics Co.
Electro-Tech Equip.
El-Tronics, Inc.
Engrg. Res. & Devel.
Ess Instr. Co.
Fisher-Pierce
Freed Transf. Co.
GE
Haledy Electronic
Heat-Timer Corp.

NEW Veeder-Root Counters



New Count-PAK / SERIES 1604

A versatile group of transistorized electronic predetermining counters designed particularly for industrial applications. These units will operate at speeds up to 5,000 counts per second, with automatic recycling at speeds up to 1,000 counts per second without losing counts. A photohead to actuate the counter can be designed to fit specific applications.

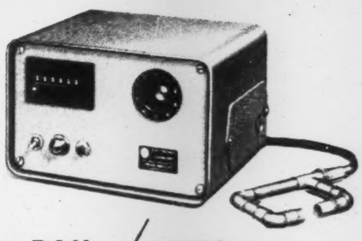
Units can be easily operated by non-technical personnel. The preset quantity can be established quickly at any point within the range of the counting instrument by means of the large selector knobs. Any number of decades can be furnished depending upon your requirement.

Multiple groups of presetting controls for sequential predetermining can be furnished on request.

These counters are ideal for batch control, sequential predetermining, or accurate length control in such applications as packaging, coil winding, slitting, stacking and material handling.

This is your complete package for predetermining counting at high speeds.

For complete details on these units, write today!



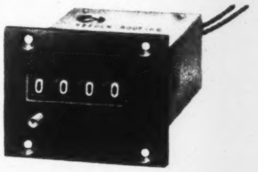
Count-PAK / SERIES 1661

Complete electronic counting package for use where high speed, long life and instant reset are required. Rated at 30,000 counts per minute but with an added decade, speeds can run up to 300,000 CPM. Consists of glow-transfer cold-cathode counting tube and high-speed magnetic counter, coupled with transistorized printed circuits. Photohead designed to your application.

The use of transistors means that heat has been eliminated and no warm up time is required. The unit is completely enclosed in an attractive, industrial case to insure long, trouble-free life.

This Count-Pak is highly suitable for high-speed direct counting applications such as canning and bottling counting or case or piece counting on conveyor lines. These Count-Paks have a reliable long life, are suitable for continuous rugged operation.

Write for complete specifications and prices today!



SERIES 1591 / Electro-Magnetic Counter

These new panel-mounted high speed counters are ideal for D.C. applications requiring accuracy and long life at very high speeds. Available with four or six figures. 3,000 counts per minute is the maximum speed recommended.

Actuated through electromagnets, these counters can be connected in series with any device having a contact arrangement. For optimum operation, 60% contact time is necessary.

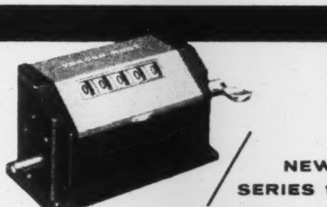
Reset is manual, push button or remote electrical.

Operating Voltage: 6, 12, 24, 48 & 115 volts DC are standard. For operation on AC power, suitable electrical components must be added externally to the counter.

Reset Voltage: 6, 12, 24, 48, 115 & 230 volts DC are standard.

These counters are suitable for industrial data processing or laboratory and scientific or instrument applications.

Write for complete specifications and dimensional information today!



High-Speed Predetermining Counter / NEW SERIES 1522

Instant quick-lever reset, plus quick and easy setting of the predetermined number are outstanding features of this counter. Measures approximately 2.6″ wide, 5″ long, 2.8″ high. Speeds up to 6,000 RPM or 8,000 CPM are maximums recommended.

Easily preset to the required number of pieces or performance-units, the counter subtracts to zero. Resetting returns wheels to original preset number.

This new counter meets standard U. S. electrical requirements (JIC Codes) . . . and is available with either electrical switch or mechanical stop. Also available without the predetermining feature, as a high-speed reset revolution counter.

Ideal for high-speed counting requirements such as coil winding, textile spinning frames, and other predetermining counter requirements.

Also available as a high-speed revolution counter without predetermining feature.

Write for complete information today!

Veeder-Root
INCORPORATED
HARTFORD 2, CONNECTICUT
Hartford, Conn • Greenville, S. C. • Altoona, Pa • Chicago • New York
Los Angeles • San Francisco • Montreal • Offices and Agents in Principal Cities

For more information circle **87** on inquiry card.

Hewlett-Packard
Hupp Electronics
Hunter Mfg.
Indust. Electronic Conts.
Industrial Electronics
Kaye Devel. Co.
Lumenite Electronic
Machinery Electrification
Magnetic Amplifiers Inc.
Nader Mfg.
NRD Instr. Co.
Optionic Research, Inc.
Photobell Co.
Post Machinery
Potter Instr. Co.
Production Instr. Co.
Ram Meter, Inc.
Rockwell Engrg. Co.
Scientific Specialties
Sherron Metallic Corp.
Spellman Television
Standard Elect. Time
Standard Piezo
Sticht Co., Herman H.
Streeter-Amet
Sunshine Scientific
Systron Corp.
Telecomputing Corp.
Thordarson-Meissner
Tri-Tronics Co.
Trott Electronics
Vacutron, Inc.
Veeder-Root
Walkirt Co.
Weston Instrs.
Worner Electronic Devices

COUNTERS, Predetermined, including Batch

Adde & Co.
Alcor Electronics
Anatran Engrg. Co.
Automation Management
Autom. Timing & Controls
Autron Engrg., Inc
Baird-Atomic
Basic Controls, Inc.
Bendix, Cincinnati
Berkeley Div.
Boulin Instr.
Burroughs Corp.
Cal-Tronics Corp.
Chatillon & Sons
Computer-Measmts. Corp.
Consolidated Avionics
Control Devices, Inc.
Corbett Science Labs.
Counter & Control Corp.
Detectron Co.
Durant Mfg.
Dymec, Inc.
Dynapar Corp.
Eagle Signal Corp.
Electrical Devel.
Electro Precision
Electro-Pulse, Inc.
Electro-Tech Equip.
Electronic Engrg. Co.
Endevco Corp.
Engrg. Research
Erie Instrumentation
Ferrara, Inc. Co.
Fischer & Porter Co.
Freed Transf. Co.
Genisco, Inc.
General Controls
Heat Timer Corp.
Hetherington, Inc.
Hunter Mfg. Co.
I-L-S Instr. Corp.
Indust. Electronic Conts.
Industrial Electronics, Inc.
Jessup Engrg. & Devel.
Kellogg Switchboard
Landis & Gyr
Machinery Electrification
Marconi Instruments
Mast Devel.
Metrotype Corp.
Nader Mfg.
Nemeth Labs.
North Amer. Philips
Nucleonic Corp.
Nucleonic Corp. of Amer.
Penn Insts. Div.
Photobell Co.
Photocon Research Prods.
Post Machinery Co.
Potter Aeronaut. Co.
Potter Instr. Co.
Presin Co.
Probescope Co.
Production Instr. Co.
Ram Meter, Inc.
Ransom Research
Raycon Corp.
Richardson Scale
Scientific Specialties
Special Instruments Lab.
Spellman Television
Standard Elect. Time
Streeter-Amet
Systron Corp.
Taller & Cooper
Technical Associates
Telechron Dept.
Trott Electronics
Veeder-Root
Walkirt Co.
Weighing Components
Westport Electric
Westronics, Inc.
Wilson & Co.

COUNTERS, Radiation, see Counters, Geiger-Mueller, also Radioactivity Instruments

COUNTERS, Revolution

Adde & Co.
Alcor Electronics
Anatran Engrg. Corp.
Autom. Timing & Controls
Baird-Atomic
Barbour Stockwell
Bereley Div.
Boulin Instr. Corp
Bowmar Instr. Corp
Bristol Co.
Brown & Sharpe
Coleman Engrg. Co.
Computer Measmts. Corp.
Consolidated Avionics
Cook Electric
Counter & Control Corp.
Cummings Mach. Wks.
Cyclotron Specialties
Dayton Instruments
Detectron Co.
Dittmore & Freimuth
Dormitzer Electric
Durant Mfg. Co.
Dymec, Inc.
Eagle Signal Corp.
Elect. Tachom. Corp.
Electro-Pulse, Inc.
Electro-Tech Equip.
Endevco Corp.
Engler Instr. Co.
Engrg. Res. & Devel
Erie Instrumentation
Freed Transf. Co.
General Controls
GE, Apparatus Sales
General Radio
Genisco, Inc.
Gordon Enterprises
Greiner Co., Emil
Gurley, W. & L. E.
Hart Mfg. Co.
Hasler-Tel Co.
Henschel Corp.
Ideal Commutator
Industrial Elect. Controls
Industrial Timer Corp.
I-L-S Instr. Corp.
Jaeger Watch
Johnson Co., E. F.
Jones Motrola Corp.
Kearfott Co.
Krohn-Hite
Marx Co., Clarence T.
Mason-Neilan Div.
Mast Devel.
McDonnell Odometer
Millen Mfg. Co.
Millers Falls Co.
Moisture Register Co.
Mueller Laboratory
Pacific Scientific
Photocon Research
Potter Aeronaut. Corp.
Potter Instr. Co.
Power Supplies
Production Instr. Co.
Ram Meter, Inc.
Ransom Research
Raycon Corp.
Redington Co.
Richardson Scale
Royson Engrg. Co.
Scherr Co.
Std. Elect. Time Co
Starrett Co., L. S.
Streeter-Amet
Sticht Co., Herman H.
Sun Electric
Sunshine Scientific
Systron Corp.
Taller & Cooper
Tech. Oil Tool Corp.
Telecomputing Corp.
Veeder-Root, Inc.
WacLine, Inc.
Walkirt Co.
Warren-Knight
Westport Electric
Zernickow Co.

COUNTERS, Scintillation (see also Radioactivity)

Alpine Labs. Ltd.
Amer. Electronics
American Tradair Corp.
Anton Electronics Labs.
Baird-Atomic
BJ Electronics
Berkeley Div.
Beva Laboratory
Chatham Electronics
Corbett Science Labs.
Curtiss-Wright
Daystrom Instrument
Detectolab, Inc.
Detectron Co.
Douglas Radio Labs
Electronic & Engrg. Serv
El-Tronics, Inc.
Fisher Res. Lab.
Forro Scientific
GE, Apparatus Sales
Hamner Electronics
Hansen Co., Wm.
Hewlett-Packard
Kaye Devel. Co.
Levinthal Electron. Prods.
Librascope, Inc.
Menlo Research Lab.
Mt. Sopris Instr. Co.
NRD Instr. Co.
Natl. Radiac, Inc.
North Amer. Philips Co.
Nuclear-Chicago
Nuclear Corp. of Amer.
Nuclear Electronics
Nuclear Measmts. Corp.
Nuclear Research Corp.
Nuclear Science & Engrg.
Nucleonic Co.
Packard Instr. Co.
Potter Instr.
Prec. Radiation Insts.
Radiation Counter Labs.
Radiation Instr. Devel. Lab.
Radiation Res. Corp.
Radioactive Prods. Inc.
Stratex Inst.
Technical Associates
Telecomputing Corp.
Tracerlab Inc.
Universal Transistor
Victoreen Instr. Co.
Western Radiation Lab.
Wood Counter Lab., N.

COUNTERS, Time, see Timers

COUNTERS, Vehicular

Aero Instr. Co.
Aristo Import Co.
Barbour-Stockwell
Computer-Measmts. Corp.
Corbett Science Labs.
Dittmore & Freimuth
Engler Instr. Co.
GE
Presin Co.
Stoelting Co.
Streeter-Amet
Taller & Cooper
Veeder-Root

COUPLERS, Directional, see Microwave Instrumentation

COUPLINGS, see Fittings, Tube

COURSE PROTRACTORS, see, Protractors, Course

COVERS, Instrument, including Dustproof and Waterproof (see also Cases)

Alpine Labs. Ltd.
Amer. Hard Rubber Co.
Bausch & Lomb
Bel-Art Products
Blossom Mfg.
Brooks & Perkins
Bud Radio, Inc.
Carroll Co., J. B.
Churchill Lighting
Conn-Craft Co.
Daniels, Inc.
Dearborn Glass Co.
DuBois Engrg. & Mfg.
Fisher Scientific
Harris Mfg. Co.
Instrument Cases Inc.
Instruments Inc.
Insuline Corp. of Amer.
Jadow, Inc.
Lancaster Glass
Lewyt Corp.
Nelson Electric Mfg.
Potter & Brumfield
Printloid Corp.
Reiner Electronics Co.
Regal Plastic Co.
Remington-Rand Univac
Remler Co.
Scientific Instr. Co.
Swanson Engrg.
Trerice Co.
U. S. Rubber
Valley-National
Vulcan Rubber Prods.
Waldom Electronics
Warwick Prods. Co
Watertown Mfg.
Zero Mfg. Co.

CRIMINOLOGY LABORATORY APPARATUS (see also Polygraphs)

Alpine Labs. Ltd.
Amer. Instr. Co.
Amer. Optical Instr.
Applied Research Labs.
Baird-Atomics
Bausch & Lomb
Beckman Div.
Eitzen Co., Louis C.
Fisher Scientific
Greiner, Emil
Hanovia Chem. & Mfg.
Jarrell-Ash
Menlo Research Lab.
Scient. Inst. Dev. Lab.
Stoelting Co.
Ultra-Violet Prods.

CRYOSTATS

Farnsworth Electronics
Perkin-Elmer

CRYPTOMETERS, Paint

Bausch & Lomb
Drage Products
Gardner Lab.
Koehler Instr. Co.

CRYSTAL DIODES

Amperex Electronics
Beckman Div.
Bendix Aviation Corp.
Centralab Div.
Fretco, Inc.
GE, Electronics Div.
Germanium Prods. Corp.
Hughes Prods. Div.
Industro Transistor Corp.
Intelex Systems
International Rectifier
Kemtron Electron Prods.
Newark Electric Co.
Ohmite Mfg. Co.
Pac. Semiconductors, Inc.
Radio Receptor Co.
Raytheon Mfg.
State Labs., Inc.
Sylvania Elect. Prods.
Transitron Electronic Corp.

CRYSTAL ELECTRODES

Constantin & Co., L. L.
Fineisen, A. R.
Premier Res. Labs.
Sylvania Elect. Prods.
Valpey Crystals

CRYSTAL GROWING EQUIPMENT

Fretco, Inc.
General Transistor Corp.
Kahle Engrg. Co.
Kinney Mfg. Div.
Minn. Honeywell Indo. Div.
NRC Equip. Corp.
Single Crystal Corp.
Temperature Engrg.

CRYSTAL HOLDERS

Admittance-Namco
Airtron, Inc.
Amer. Electronic Labs.
Birtcher Corp.
Bogart Mfg. Corp.
Centralab Div.
Corning Glass Works
Constantin & Co.
Diamond Antenna & Micro.
Electrical Industries, Inc.
Glass-Tile Indust.
Grayhill
Hermetic Seal
Insuline Corp.
Johnson Co., E. F.
Microwave Devel.
Millen Mfg. Co.
Molded Insulation Co.
Premier Res. Labs.
Reeves-Hoffman Div.
Sierra Electronic
Sylvania Elect. Prods.
U. S. Gasket Co.
Waldom Electronics Inc.

CRYSTALS, Barium Titanate

Bendix-Pacific
Branson Instruments
Brush Instruments
Centralab Div.
Clevite Elect. Comp.
Dyna-Empire
E & W Optical Co.
Endevco Corp.
Erie Resistor
GE Spec. Electronic
Gulton Industries
Lab. Optical
Levinthal Electronic
Single Crystal Corp.
Stupakoff Div.

CRYSTALS, Germanium

Centralab Div.
Genl. Transistor Corp.
Germanium Prods. Corp.
Industro Transistor Corp.
Intelex Systems
International Rectifier
Natl. Aircraft Corp.
Radio Receptor Co.
Semimetals, Inc.
Single Crystal Corp.
Sylvania Elec. Prods.
Texas Insts., Inc.

CRYSTALS, Piezoelectric

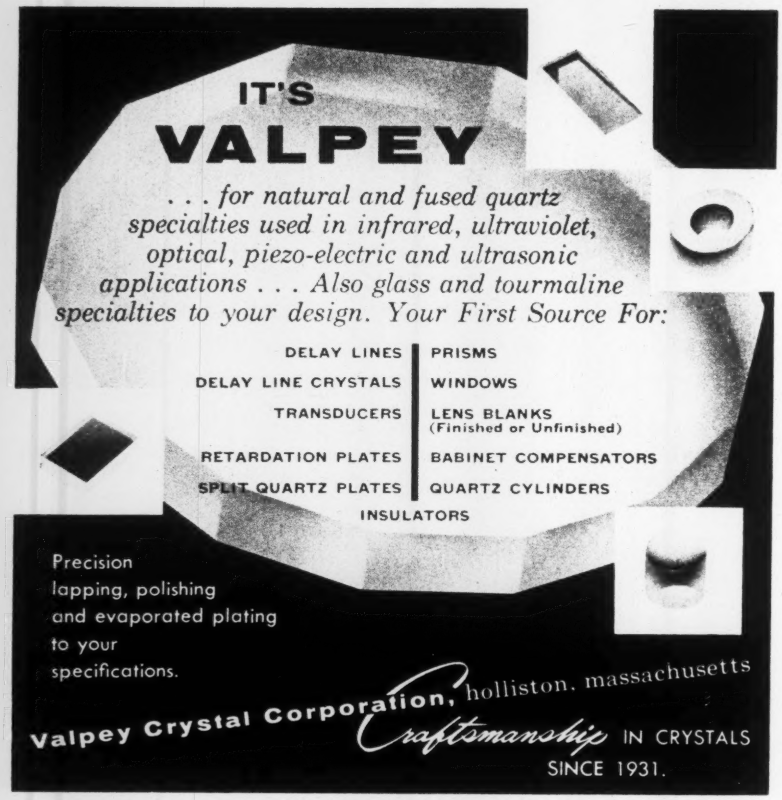
Bausch & Lomb
Bio-Rad Labs.
Bliley Electric
Branson Instruments
Brush Instruments
Centralab Div.
Clark Crystal
Clevite Elect. Comp.
Crystal Research Labs.
Dearborn Scientific
Downing Crystal Co.
E & W Optical
Endevco Corp.
Esco Prods. Co.
GE
General Radio Co.
Helio Instr. Co.
Hupp Electronics
Internat. Crystal Mfg.
Knights Co.
McCoy Electronics
North Amer. Philips
Premier Res. Labs.
RCA Div.
Reeves Hoffman Corp.
Standard Arcturus
Stupakoff Div.
Valpey Crystal Corp.
Vectron, Inc.

CRYSTALS, Quartz, Rochelle Salt

Baker Chem. Co.
Baird-Atomic
Bendix Aviation Corp.
Bio-Rad Labs.
Bliley Electric
Rodnar Industries
Branson Instruments
Brush Instruments
Clark Crystal
Clevite Elect. Comp.
Crystal Research Labs.
Dearborn Scientific
Downing Crystal Co.
E & W Optical
Endevco Corp.
Esco Products
Fecker, Inc.
Fish-Schurman
Gaertner Scientific
G.E., Electronics Div.
General Radio Co.
Helio Instr. Co.
Hupp Electronics
Internat. Devel. Co.
Kaar Engrg. Co.
Knights Co.
Lynn, Robert M.
McCoy Electronics
Newark Electric Co
North Amer. Philips
Pan American Trade Dev.
Premier Res. Labs.
RCA Div.
Reeves Hoffman Corp.
Standard Arcturus
Unertl Optical
Valpey Crystal Corp.
Vectron, Inc.
Wallace & Tiernan
Western Electric

CRYSTALS, Rock Salt, Optical

Bronoptics Co.
Fish-Schurman
Fretco, Inc.
Harshaw Chemical
Internat. Optical
Natl. Radiac, Inc.



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. . . for natural and fused quartz specialties used in infrared, ultraviolet, optical, piezo-electric and ultrasonic applications . . . Also glass and tourmaline specialties to your design. Your First Source For:

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TRANSDUCERS
RETARDATION PLATES
SPLIT QUARTZ PLATES
PRISMS
WINDOWS
LENS BLANKS (Finished or Unfinished)
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QUARTZ CYLINDERS
INSULATORS

Precision lapping, polishing and evaporated plating to your specifications.

Valpey Crystal Corporation, holliston, massachusetts
Craftsmanship IN CRYSTALS SINCE 1931.

For more information circle 88 on inquiry card.

AMPERITE PREFERRED

by design engineers—because they're

MOST COMPACT • MOST ECONOMICAL

SIMPLEST • HERMETICALLY SEALED

Thermostatic DELAY RELAYS

2 to 180 Seconds

Actuated by a heater, they operate on A.C., D.C., or Pulsating Current.

Hermetically sealed. Not affected by altitude, moisture, or climate changes.

SPST only—normally open or closed.

Compensated for ambient temperature changes from —55° to +70° C. Heaters consume approximately 2 W. and may be operated continuously. The units are **rugged, explosion-proof, long-lived,** and—**inexpensive!**

TYPES: Standard Radio Octal, and 9-Pin Miniature . . . **List Price, $4.00.** Standard Delays

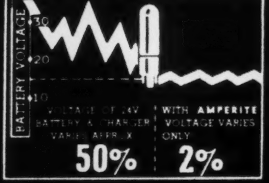
AMPERITE DELAY RELAY

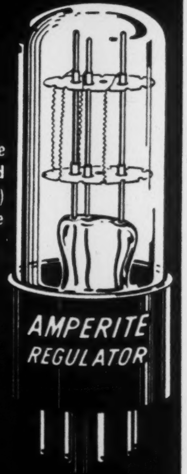
Also — **Amperite Differential Relays:** Used for automatic overload, under-voltage or under-current protection.

PROBLEM? Send for Bulletin No. TR-81

BALLAST REGULATORS

Amperite Regulators are designed to keep the current in a circuit **automatically regulated** at a definite value (for example, 0.5 amp.) . . . For currents of 60 ma. to 5 amps. Operate on A.C., D.C., or Pulsating Current.





Hermetically sealed, they are not affected by changes in altitude, ambient temperature (—55° to +90° C.), or humidity . . . Rugged, light, compact, most inexpensive . . . . **List Price, $3.00.**

Write for 4-page Technical Bulletin No. AB-51

AMPERITE CO. Inc., 561 Broadway, New York 12, N. Y.
Telephone: CAnal 6-1446
In Canada: Atlas Radio Corp., Ltd., 50 Wingold Ave., Toronto 10

For more information circle **89** on inquiry card.

Natl. Tech. Labs.
Palos Optical
Perkin-Elmer
Regal Instr. Co.
Single Crystal Corp.
Unertl Optical
Valpey Crystal Corp.

CRYSTALS, Tourmaline

Bio-Rad Labs.
Clerk Crystal
Dearborn Scientific
Endevco Corp.
Fecker, Inc.
Helio Instr. Co.
Knights Co.
Premier Res. Labs.
Radiation Counter Labs.
Unertl Optical
Valpey Crystal Corp.
Zeiss, Inc., Carl

CRYSTALS FOR WATCHES, GAGES, etc.

Amersil Co., Inc.
Bache & Co., Semon
Buhl Optical
Cast Optics Corp.
Dearborn Glass
Edna Lite Co.
Elgin Natl. Watch
Felsenthal & Sons
Ferner Co.
Fish-Schurman
Gallien, R. P.
Germanow-Simon
Glass Specialty
Hopp Press, Inc.
Imetra Co. Ltd.
Inlaid Optical
Lancaster Glass
Marsco Mfg.
Marshall Co.
Modern Tech. Supply
Molded Insulation Co.
New Haven Clock
Parisian Novelty Co.
Printloid Co.
Regal Instr. Co.
Rohm & Hass
Sickles & Sons
Stilcocks-Miller
Steel Co., Herman D.
Swiss Jewel Co.
Valley Natl. Corp.
Wakmann Watch Co.

CUBIC FOOT BOTTLES, see Specific Gravity Bottles

CUBICLES, see Panels

CURLED HAIR PRODUCTS for Packaging, Cushioning, etc.

Armour & Co.
Blockson & Co.
Goodrich, Sponge Prods.

CURRENT INDICATORS, see Ammeters

CURRENT LIMITERS, see Current Regulators

CURRENT REGULATORS, including Ballast Tubes

Abrams Instr. Co.
Advanced Electronics
Amer. Measurement & Control, Inc.
Amperex Electronic Corp.
Amperite Co.
Amplifier Co.
Anton Electronics Labs.
Askania Reg. Co.
Assembly Products
Automatic Electric
Autom. Timing & Controls
Avion Div.
Beck Bros.
Bendix, Eclipse-Pioneer
Bendix, Red Bank Div.
Betts & Betts
Bogue Electric Mfg.
Bradley Labs.
Bristol Co.
Brit. Electronic Sales
Burndy Engrg. Co.
CBS-Hytron Div.
Cal-Tronics Corp.
Chatham Electronics
Clark Controller
Clarostat Mfg.
Conoflow Corp.
Cook Electric
Cutler-Hammer
Devtronics Inc.
DoAll Co.
Donner Scientific
Dressen-Barnes
Edison, Inc. Thomas
El Mec Labs.
Electric Reg. Corp.
Electronic Measurements Co.
Electronic Products
Electronic Research Assoc.
Electrosig Corp.
Engineered Magnetics Div.
Federal Telephone & Radio
Fielden Instr. Div.
Fisher-Pierce
Furst Electronics
G-V Controls Inc.
General Controls
GE, Apparatus Sales
GE, Tube Dept.
General Magnetics
Hagan Chem. & Controls
Hevi-Duty Electric
Industro Transistor Corp.
Kepco Labs.
Larson Instr. Co.
Lectronic Research
Lewis & Co., J. B.
Magnetic Amplifiers
Magnetic Instr. Co.
Magnetic Research Corp.
Manning, Maxwell & Moore
Minneapolis-Honeywell, Boston Div.
Rubicon Instrs.
Nankervis Co., G. L.
NJE Corp.
Newark Electric Co.
North Hills Elect. Co.
Ohmite Mfg.
Olympic Devel. Co.
Performance Measmts.
Perkin Engrg. Co.
Peschel Electronics
Philco Corp.
Precise Measmts. Co.
RCA Div.
Raytheon Mfg.
Richardson-Allen
Rockwell Engrg. Co.
Roller-Smith
Shallcross Controls
Sherron Metallic Corp.
Sola Electric
Sorensen & Co.
Square D Co.
Streeter-Amet
Teletronics Lab.
Thermo Electric Mfg.
Thordarson-Meissner
Transistor Devices
Tung-Sol Electric
United Transf. Co.
Victoreen Instr. Co.
Victory Engrg. Corp.
Wallson Associates
Wilson & Co., G. C.

CURVE FOLLOWERS (see also X-Y Recorders)

Aero Electronics
Alabama Automation Corp.
ALWAC Corp.
Berkeley Div.
Bristol Co.
Corbett Science Labs.
Electro Insts., Inc.
Electronic Assocs.
Geotechnical Corp.
Instrument Devel. & Mfg.
Librascope, Inc.
Lucian Labs.
Marconi Instruments
Mid-Century Instrumatic
Moseley Co.
Potter Instr. Co.
Royson Engrg. Co.
Scientific Specialties
Sterling Precision
Telecomputing Corp.
Westronics, Inc.

CURVE TRACERS, see Drawing Instruments

CUTTERS, Midget Milling

Fineisen, A. R.
Gallien, R. P.
Gorton Machine Co.
Grobet File Corp.
Howard Clock
Jensen Mfg. Co.
Pratt & Whitney
Preis Engraving Mach.
Severance Tool Industs.
Steel Co., Herman D.
Willey's Carbide Tool Co.
Woodruff & Stokes

CYCLE CONTROLLERS, see Counters, also Timers; (also Program Controllers)

CYCLOMETERS

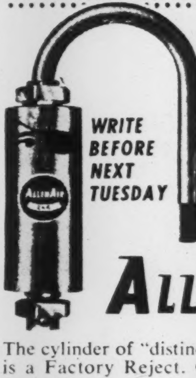
Penn Insts. Div.
Veeder-Root

CYLINDERS, Air and/or Hydraulic

Accessory Prods. Corp.
Airmatic Valve, Inc.
Allen Co.
Annin Co.
Applied Dynamics Corp.
Autoclave Engrs., Inc.
Bellows Co.
Bendix Aviation Corp.
Carruthers & Fernandez
Cash Co., A. W.
Conoflow Corp.
Cooper Co.
Defender Instr. & Reg.
DeZurick Shower Co.
Foxboro Co.
Gadgets, Inc.
Galland-Henning
Hagan Chem. & Controls
Hanna Engrg. Works
Hannifin Mfg. Co.
Hoke, Inc.
Hydraulic Res. and Mfg.
Instrument Devel. & Mfg.
Johnson Service
Lear, Inc.
Leedeen Mfg.
Lindberg Engrg. Co.
Linde Co.
Logansport Machine, Inc.
Mead Specialties Co.
Miller Fluid Power
Natl. Pneumatic Co.
Pegasus Labs.
Rahn & Co.
Ribble Engrg. Co.
Rivett Lathe & Grinder
R. K. L. Valve & Mfg.
Schrader's Son
Studebaker Hydraulic Prods.
Swanson Engrg. Co.
Vickers, Inc.
Weatherhead Co.
Westinghouse Air Brake Co.
Weston Hydraulics

CYLINDERS, GRADUATING, see Laboratory Apparatus

free catalog
ALLENAIR



47-page catalog illustrating complete line of

AIR CYLINDERS,
AIR VALVES,
AIR CLAMPS,
DIAL FEED
TABLES

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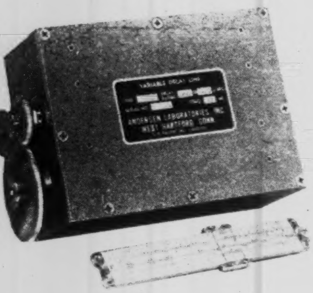
Company ....
Address ....
City .... **Zone** ...... **State** ....

For more information circle **90** on inquiry card.

ON RADAR SIMULATORS . . .

FOR INCREASED VARIATIONS IN DELAY ANDERSEN OFFERS VARIABLE ULTRASONIC DELAY LINES



Capable of variations in delay up to 250 microseconds, Andersen's patented variable ultrasonic delay lines are especially suited for radar simulator applications. They have excellent stability... no short-time jitter. Improved mechanical design enables delay adjustment by servo-mechanisms. Delay can be set as accurately as .01 microseconds. Request data on both variable and fixed lines

Andersen Laboratories, Inc.
501 New Park Avenue
West Hartford, Connecticut

For more information circle **91** on inquiry card.

CYLINDERS, Rubber

Atlantic India Rubber
Genl. Tire
Goodrich Co., B. F.
Luzerne Rubber
Raybestos-Manhattan
U. S. Rubber

DAMPERS, PRESSURE, see Pressure Snubbers

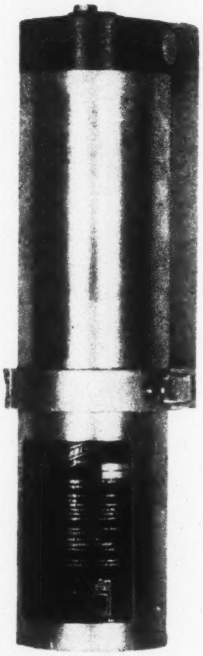
DAMPING TESTING EQUIPMENT and INSTRUMENTS (see also Impact)

Baldwin-Lima-Hamilton
Farnsworth Electronics
Genisco, Inc.
Industrial Control Co
Kinetic Instr. Co.
Lessells & Assoc.
M. B. Mfg. Co.
North Atlantic Industs.
Oltronix Co.
Wiancko Engrg. Co.

D'ARSONVAL MOVEMENTS (see also Electrical Indicators, also Voltmeters, Ammeters, etc.)

Amer. Metrix Corp.
Assembly Products
Bristol Co.
Brush Instruments
Burton-Rogers
DeJur-Amsco
Edin Co.
Edison, Thomas A
Elect. Design & Mfg.
Engrg. Enterprises
GE. Apparatus Sales
Geotechnical Corp.
Hickok Elect. Instr.
Ideal Precision
Leeds & Northrup
Mastercraft Instr.
Meters, Inc.
Minneapolis-Honeywell
Rubicon Instrs.
Phaostron Co.
Photron Instr. Co.
Prec. App. Co.
Sendur Inc.
Sensitive Res. Instr.
Simpson Electric
Sun Electric
Triplett Electcl. Instr.
WacLine, Inc.
Welch Mfg. Co., W. M.
Weston Instruments
Winslow Co. Inc.

Dehydration Of Gases Pressures Up To 12,000 PSI



- New Leakproof Design—Chambers and Cartridges "O" Ring sealed, no possibility of gas bypassing the cartridge.
- No tools required to change cartridge or Mechanical Filter Element for cleaning.
- Manual or Automatic Units. Portable, stationary or airborne installations.

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2350 East 38th Street, Los Angeles 58, California

For more information circle **149** on inquiry card.

VALPEY *craftsmanship has produced frequency control, transducer and filter crystals to withstand the severe vibration and extended ambient temperatures encountered by today's missiles and ground equipment. Valpey, knowing what is expected in the design of such equipment, handles these problems realistically, utilizing the experience gained over the past 27 years. If you have a problem in frequency or temperature control which must be solved, contact*

VALPEY . . YOUR SOURCE FOR:

- Oscillator crystals — in audio through VHF range for military and commercial requirements.
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- Temperature controlled ovens for crystals and small components.
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To insure performance to your specifications, Valpey has complete up-to-date test equipment, with access to the most stringent environmental test facilities.

Type VR13

Type VM6

Type VR6

Type VCO-1

Type VCO-2

CATALOGS ON REQUEST.

Valpey Crystal Corporation, holliston, massachusetts

Craftsmanship IN CRYSTALS SINCE 1931

For more information circle **92** on inquiry card.

D'ARSONVAL-TYPE CONTROLLERS, including Meter-Relays, Contact Meters, etc.

Amer. Metrix Corp.
Assembly Products
Bristol Co.
Edison, Inc., Thomas A
Electro-Tech Equip.
GE Apparatus Sales
Illinois Testing Labs.
Larson Instr. Co.
Lewis Engrg. Co.
Marion Electcl. Instr.
Minneapolis-Honeywell
  Indust. Div.
Sensitive Res. Instr.
Simpson Electric
Tipp-Tronic, Inc.
Triplett Electcl. Instr.
WacLine, Inc.
Waters Mfg.
Weston Instr.

DATA-HANDLING SYSTEMS, see Data Processing Systems

DATA-PROCESSING SYSTEMS & COMPONENTS, including Tape Transports, Readers, Loggers, etc. (see also Computers, also Printers)

ACF Electronics
Aero Electronics
Air Research Mfg.
Alden Electron & Impulse
ALWAC Corp.
Amer. Helicopter Div
Amer. Mach. & Foundry
Ampex Corp.
Anelex Corp.
Applied Science Corp. of
  Princeton
Arnoux Corp.
Austin Co.
Automation Management
Autonetics Div.
BJ Electronics
Baird-Atomic
Bendix, Computer Div.
Bendix-Pacific
Benson-Lehner
Berkeley Div.
Bristol Engrg. Co.
Burroughs Electronics
Century Electronics & Insts.
Coleman Engrg. Co.
Commercial Controls Corp.
Comptometer Corp.
Computer Controls Co.
Consol Electrodynamics
Consolidated Avionics
Control Data Corp.
Cook Electric
Corbett Science Labs.
Datascan Inc.
Datex Corp.
Digital Equipment
Digitronics Corp.
Donner Scientific
Dresser Products, Inc
Dymec, Inc
Electro Insts., Inc
ElectroData Corp
Electronic Assocs.
Electronic Control Systems
Electronic Engrg. Co
Electronics Corp. of Amer
Epsco, Inc.
Exact Weight Scale Co
Farnsworth Electronics
Fed. Telephone & Radio
Feedback Controls
Ferranti Electric
Fielden Instr. Div.
Fischer & Porter Co.
Fish-Schurman
Ford Instr. Co
Franklin Electronics
Friden, Inc.
Geotechnical Corporation
Genisco, Inc.
Giannini & Co.
Gilmore Industries
Hanson-Gorrill-Brian
Hare Co., D G C.
Hoover Electronics
Hycon Eastern
Intelex Systems
Indikon Company
Industrial Electronic Engrs
Industrial Nucleonics
Inst. Corp. of Fla.
Internat. Busines Mach
Julie Res. Labs.
Kleinschmidt, Inc.
Larson Instrument
Leeds & Northrup
Librascope, Inc.
Litton, Elect. Equip. Div.
Magnetics Res. Co.
Management Assistance
Marchant Calculators
Maxson Instr. Div.
Midwestern Instruments
Minneapolis-Honeywell
Monroe Calc. Mach. Co.
Moseley Co.
Mountain Systems, Inc.
National Co
Navigation Computer
Nelson Instr. Co.
Newton Co.
Non-Linear Systems
Northam Electronics
Northrop Anaheim
Nuclear Devel. Corp.
Nuclear Corp. of Amer.
Optimized Devices
Orban Co., Kurt
Panellit, Inc.
Parson Co., Ralph M.
Post Machinery Co

Potter Instr. Co
Radiation Inc.
Ramsey Engrg. Co
Remington Rand
Rheem Mfg
Royal McBee Corp
Shand & Jurs Co.
Shepard Labs
Soroban Engrg
Stavid Engrg., Inc
Sterling Prec. Corp
Stromberg-Carlson
Systematics, Inc
Systems Div., Beckman
Systron Corp
Taller & Cooper
Tally Register
Taylor Instr. Cos
Technitrol Engrg. Co
Telemeter Magnetics, Inc
Telecomputing Corp
Texas Insts., Inc.
Thompson-Ramo
Ultrasonic Corp
United Electrodynamics
Vought Co
Waldorf Instr. Co
Wang Labs
Wayne-Georgie Corp
Westronics, Inc.
Wiancko Engrg. Co

DATA-REDUCTION SYSTEMS, see Data Processing Systems

DATA-TRANSMISSION SYSTEMS, see Telemetering

DEADWEIGHT TESTERS, see Pressure Instrument Calibrators, Deadweight

DECADE BOXES, Resistance, Capacitance, Inductance, etc.

Aero Electronics
Aerovox Corp.
Alco Electronics
Arenberg Ultrasonic
Berkeley Div.
Brit. Electronics Sales
Central Scientific
Cinema Engrg. Co.
Clarostat Mfg.
Coaxial Connector Co.
Consol. Resistance Co
Cornell Dubilier
Daigger & Co.
Daven Co.
Eastern Prec. Resistor
Electro Measurements, Inc
Electro-Tech Equip.
Electronic Instr. Co.
Electronic Measmts. Co.
Endevco Corp
Federal Telephone & Radio
Freed Transf. Co
GE, Apparatus Sales
General Radio Co.
Gray Instr. Co.
Hycor Div.
Industrial Insts., Inc.
Julie Res. Labs
Leeds & Northrup
Mid-Century Instrumatic
Mineapolis-Honeywell
 Rubicon Instrs.
Muirhead Instrument
Newark Electric Co.
Ohmite Mfg. Co.
Physics Research Labs
Pimex, Inc.
Reiner Electronics
Research Instr. Co.
Rochester Electronics
Scientific Specialties
Shallcross Mfg.
Simmonds Aerocessories
Southern Electronics
Tech Labs., Inc.
Technique Associates
Teletronics Labs., Inc.
Telex, Inc.
United Optical
United Transf. Corp.
Warwick Products
Welch Mfg. Co., W. M.

DECADE COUNTERS, see Counters, Decade

DECALCOMANIAS

Brady Co., W. H.
C & H Supply Co.
Chicago Decalcomania
Consolidated Decal
Internat. Decalcomania
Meyercord Co.
Miller Dial & Name Pl
Natl. Decalcomania
North Shore Nameplate
Palm Bros. Decalcomania
Park Nameplate Co
Photoplating Co.
Seton Name Plate
Switzer Bros.
Topflight Tape Co

DECELEROMETERS, see Accelerometers

DECIBEL METERS, see Sound Level Indicators

DEEP SEA INSTRUMENTS

Askania-Werke, A. G.
Atlantic Research
Bendix-Pacific
Bristol Co.
Brush Instruments
Chesapeake Instr.
Colvin Labs., Inc.
Dittmore & Freimuth
General Precision
Kahl Scient. Instr.
Kearfott Co.
Moeller Instr. Co.
Raytheon Mfg. Co.
Seegers Mfg.
Taylor Instr. Cos.
Trimount Instr. Co.
Varo Mfg. Co.
Wallace & Tiernan, Inc.
Weskler Instrs.
Wiancko Engrg. Co.

DEFLECTION TESTERS, Light Wave

Acme Industrial
Bowser Inc.
Dittmore & Freimuth
Engis Equipt. Co.
Gaertner Scientific
Industrial Test Equipt.
Opplem Co., Inc.
Optron Corp.
Sherron Metallic Corp
Van Keuren Co.

DEFORMETERS

Baldwin-Lima-Hamilton
Dietert Co.

DEHUMIDIFIERS, see Dryers, Air or Gas

DEHYDRATION EQUIPMENT, see Dryers, Air or Gas, also Humidity

DELAY LINES

Advance Electronics
Aerolite Electronics
Aerovox Corp.
Alden Products
AMP, Inc.
Amersil Co.
Andersen Labs.
Alto Scientific
Arenberg Ultrasonic Lab.
Bellmore Gear
Bliley Electric
Brew & Co., Richard D
Burnell & Co
Burroughs Corp
C.G.S. Labs.
Carad Corp
Centralab Div.
Coaxial Connector Co.
Colortone Electronics
Columbia Technical Corp
Communication Access.
Computer Control
Control Electronics Co.
Cornell-Dubilier Elect.
Corning Glass Works
Daven Co.
Detectolab, Inc.
Dietz Design & Mfg

When Using This Guide look under the variable, e.g., Pressure Gages (not Gages, Pressure); or look under the noun—Magnets, Permanent (not Permanent Magnets).

BREW DELAY LINES

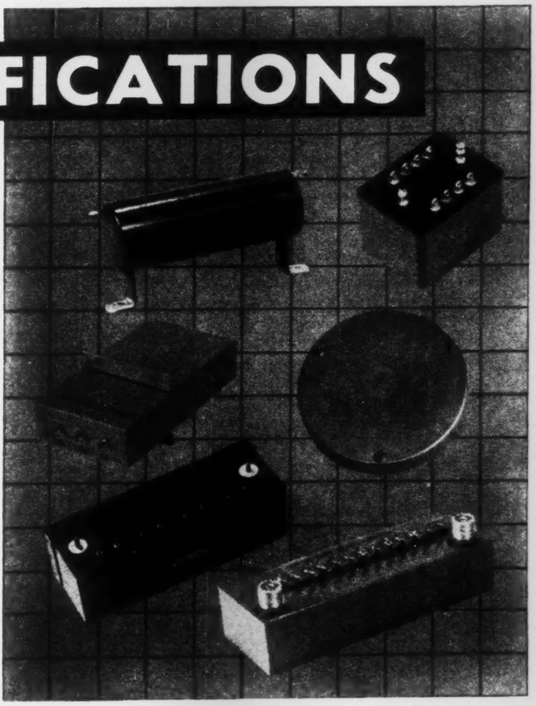
. . . designed to your

SPECIFICATIONS

LUMPED CONSTANT

DISTRIBUTED CONSTANT

ULTRASONIC



BREW'S experienced personnel can solve your Delay Line Problems.

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- Modern Assembly Line
- Special Prototype Equipment
- Quality Control on Short or Long Runs

Founded in 1946 for design, development and manufacture of delay lines.

Brew offers you the "one source" for Distributed Constant, Lumped Constant, and Ultrasonic Delay Lines. You and your product will benefit from Brew's modern and complete production facilities, pioneer experience, and complete cooperation from our personnel.

BREW Richard D. Brew and Company, Inc.
Concord, New Hampshire
design · development · manufacture

For more information circle 93 on inquiry card.

Digitronics Corp.
Dilectron Div.
DuMont Labs., Allen B.
ESC Corp.
Electl. & Physical Instr
Empire State Labs.
Epsco, Inc.
Essex Electronics
Ferranti Electric
Filtron Co., Inc.
Freed Transf. Co.
GE Spec. Electronic
General Radio Co.
Gudeman Co.
Gulton Industries
Helipot Div.
Hoover Electronics
International Resis.
Lab. for Electronics
MacLeod & Hanopol
Magnetics Res. Co.
Micamold Electronics
Millen Mfg. Co.
Natl. Aircraft Corp.
Neutronics Research
North Atlantic Indust.
Orbitran Co.
Packard Bell-Electrns.
PCA Electronics
Polyphase Instr.
Ratigan Electronics
Raytheon Mfg. Co.
Shallcross Mfg.
Sibley Co.
Sickles Div.
Sprague Electric
Technitrol Engrg. Co.
Telex, E-A Div.
Texas Insts., Inc.
Tobe Deutschmann
United Transf. Corp.
Valor Electronics
Virginia Electronics
Wickes Engrg. & Constr.

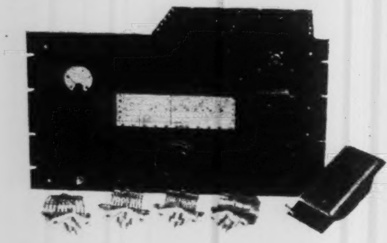
DELINEASCOPES

Bausch & Lomb
Beseler Co.
Ercona Corp.
Gordon Enterprises
Jarrel-Ash

ARENBERG ULTRASONIC LABORATORY, INC.

Equipment from this laboratory will be satisfactory in electronic work between 1—100 MC, both with pulses and C. W. Applications are in ultrasonics, filter analysis, integration, transient responses, time measurements, etc. The dynamic range of complete systems is over 146 db.

PG-650—High Power Pulsed Oscillator



Frequency Range	5-80 MC* in 7 ranges
Rise Time (Max.)	0.5 usec
R. F. Output Voltage (Min.)	0-300 peak to peak into 93 ohms
P.R.F. (external trigger)	0-3000 C.P.S.
P.R.F. Internal	50-2500 locking on 60 cycles
Pulse Length	1½-10 usec
Trigger Delay Internal	12-100 usec
Trigger to Pulse Jitter (Max.)	.005 usec
Pulse to Pulse Jitter (Max.)	.03%
Noise Output Between Pulses	Thermal Noise from Termination
R. F. Leakage	Negligible

*This range may be extended with special coils from 0.5 to 150 MC.

WA-600—Wide Band Amplifier

Designed to allow complete coverage of the 6-60 MC range without adjustment or change in I.F. Strips. The output is available either at the original frequency or from a full wave detector. The r.f. jack may be used in a feed back loop or with a local oscillator as a converter.

Input Frequency	6-60 MC to 3 db points
Gain	80-90 db
Video Bandwidth	10 MC
Input Impedance	93 ohms (1 watt)
Output Impedance	Cathode Follower Terminated Externally
Output Voltage	10 Volts Positive-max.
Output Power for Preamplifier (Min.)	125 DC reg. @ 20 MA 6.3V @ 350 MC

Choice of D.C. Amplifier Flat to 2 KC for band pass measurements with Swept Oscillator.

PA-620—Preamplifier. In conjunction with WA-600 units which provide power, this device acts as an impedance matching device and narrow band selector to provide a 20-30 db improvement in S/N ratio.

ATT-693, ATT-650—Precision Attenuators. Ranges of 0-122 with 1 watt 1% precision resistors ensure wide utility.

Write for bulletins to:

Arenberg Ultrasonic Laboratory, Inc.
94 Green Street **Jamaica Plain 30, Mass.**
Phone—JAmaica 2-8640

For more information circle **94** on inquiry card.

DEMAGNETIZERS

Aero Electronics Co.
Amplifier Corp. of Amer.
Annis Co.
Blanchard **Machine**
Crucible **Steel**
Cinema Engineering
GE **Metall. Prods.** Div.
Green **Rectifier** Co.
Ideal Industries, Inc.
Indiana Steel **Prods.**
Jadow, Inc.
Kendrick & Davis
Kinevox
Librascope, Burbank Div.
Lufkin Rule Co.
Luma Elect. Equip.
Magnaflux Corp.
Magnetic Analysis Corp.
Magnetic Instr. Co.
Martindale Electric
Microtran Co.
Newall Mfg. Co.
Opad Electric
Osborne Electric Co.
Radio Frequency Labs.
Taft-Peirce Mfg. Co.

DEMAND, Indicators or Recorders, see Load Indicators, Electrical

DEMODULATORS, Electronic

Acromag, Inc.
Arnoux Corp.
Autom. **Timing & Controls**
BJ Electronics
Bendix-Pacific
Bourns Labs.
Century Geophysical
Collins, Corp., G. L.
Electro-Mechanical Res.
Empire **State Labs.**
Consolidated **Avionics**
Geotechnical Corp.
Hoover Electronics
Industrial Control Co.
Industrial Electronics
Indust. Test Equip.
Kaiser Aircraft & Elect.
Kay Electric Co.
Magnetic Instr. Co.
Menlo Park Engrg.
Micro Gee Prods., Inc.
Minn-Honeywell, Boston
Model Engrg. & Mfg.
National Co.
North Atlantic Industs.
Pace Engrg. Co.
Parsons Co., **Ralph M.**
Polytechnic **Res. &** Devel.
Radionics, Inc.
Sanborn Co.
Sanders Associates
Servo **Corp.** of **Amer.**
Southwestern **Ind.** Elec.
Stelma, Inc.
Texas Div. Clevite
Torwico Electronics, Inc.
Ultradyne **Engrg.** Labs.
Virginia **Electronics**
Voltron Products
Wiancko **Engrg.** Co.

DENSITOMETERS, Gas and/or Liquid, including Densimeters, Micro-densitometers, etc. (see also Specific Gravity)

Agfa Ansco
Amer. Instr. Co.
Applied Research **Labs.**
Baird-Atomic
Bausch & Lomb
Bendix Aviation Corp.
Biddle Co., James G.
Brinkmann Instruments
Bristol Co.
Cambridge Instr. Co.
Dearborn Scientific
Eastman Kodak
Electronics Corp. of Amer.
Epic, Inc.
Ess Instr. Co.
Farrand Optical
Ferner Co.
Fish-Schurman
Fischer & Porter Co.
Fisher Scientific
Foxboro Co.
Gaertner **Scientific**
General Communication
GE
Gilmore **Industries**
Gordon **Enterprises**
Hall Sonic Engrg. Co.
Hayes Scientific
Henson Co.
Hogan Labs.
Instrumentation Assoc.
Instrument Devel. Labs.
Jarrell-Ash
Kaye Devel. Co.
Liquidometer Corp
Macbeth Corp
Mfrs. Engrg. & Equip.
Maxson Instr. Div.
Mt. Sopris Instr. Co.
Natl. Spectrographic Labs.
North **Amer.** Philips
Nuclear **Corp.** of Amer.
Ohmart Corp.
Permutit Co.
Pfaltz & Bauer
Phoenix Prec. Instr.
Photo Research Corp.
Photovolt Corp.
Poole Instruments
Potter Aeronaut. Co.
Prec. Thermom. & Insts.
Radioactive Prods., Inc.
Rainhart Co.
Rockwell Engrg. Co.
Simmonds Aerocessories
Sipp-Eastwood Corp
Spinco Div.
Testing Machines, Inc.
United **Engineers**
Vectron, Inc.
Welch Mfg. Co., W. M.
Weston Instr.
Williams, Brown & Earle
Zeiss, Inc., **Carl**
Zoomar Corp.

DENSITOMETERS, Optical

Baird-Atomic
Bausch & Lomb
Bronoptics Co.
Epic Inc.
Ercona Corp.
Ferner Co., R. Y.
Fish-Schurman
Gaertner Scientific
Gordon **Enterprises**
Helio Instr. Co.
Instr. Devel. Labs.
Jarrell-Ash
Kollmorgen **Optical**
Macbeth Corp.
Mfrs. Engrg. & Equipt.
National Spectrographic
Neutronics Research
Phoenix Prec. Instr.
Photovolt Corp.
Seismograph Service Corp.
Scientific Specialties
Specialized Insts. Corp.
Std. Electronic Res.
Welch Mfg. Co., W. M.
Will Corp.
Zoomar **Corp**

DENSITOMETERS, Photographic

Applied **Research Labs.**
Baird-**Atomic**
Davenport **Mfg.**
Gordon **Enterprises**
Jarrell-Ash
Macbeth **Corp.**
Mason Instr. Co.
Mt. Sopris **Instr.** Co
National **Spectrographic**
Photo **Res.** Corp.
Scientific **Specialties**
Shepard Labs.
Vectron, Inc.
Welch **Mfg.** Co., W. M.
Weston Instr.
Zoomar Corp.

DENSITY CONTROLLERS

Acme Reg. Co.
Amer. Tradair **Corp.**
Askania Reg. Co.
Autom. Timing & Control
Autom. Valve Control
Bailey Meter Co.
Bendix, **Cincinnati** Div.
Black, Sivalls & Bryson
Bristol Co.
Climax Div.
Cutler-**Hammer**
De-**Tec-Tronic** Corp.
Ess **Instr.** Co.
Fielden **Instr. Div.**
Fischer & Porter Co.
Fish-Schurman
Foxboro Co.
Gaydon **Co.**
General Communication
General Controls
Hagan Chemical & Controls
Hays Corp.
Indust. Nucleonics
Instruments Inc.
Isotope **Products**
Larson Instr. Co.
Leeds & Northrup
Lumenite **Electronics**
Macbeth Corp.
Manning, Maxwell & Moore

When Using This Guide look under the variable, e.g., Pressure Gages (not Gages, Pressure); or look under the noun—Magnets, Permanent (not Permanent Magnets).

Mine & Smelter Supply
Minneapolis-Honeywell
Moore **Products**
Norcross Corp.
Nuclear Corp. of Amer.
Nuclear **Research** Corp.
Ohmart Corp.
Penn Insts. Div.
Potter **Aeronaut.**
Prec. Thermom. & Insts
Radioactive Prods., Inc.
Ram Meter, Inc.
Refinery Supply Co
Reliance Instr. Mfg.
Republic **Flow Meters**
Roy Co., **Milton**
Shallcross **Controls**
Standard Instr. Co.
Taylor Instr. Cos.
Thermco **Labs.**
Wheelco Instr. Div.
Weston Instr.

DEPTH, Liquid, see Level

DEPTH INDICATORS, Navigational

Amer. Hydromath Corp
Bendix-Pacific
Bogue Electric Mfg.
Bristol Co.
Brush Instruments
Burton **Mfg.**
Colvin Labs.
Crosby Valve & Gage
Dittmore **& Freimuth**
Georator Corp.
Gulton Industries
Hagan Chemical & Controls
Hansen Co.
Hoover **Electronics**
Kaar Engrg. Co.
Kahl Scientific
Kearfott Co.
King **Engrg.** Corp
Liquidepth Indicators
Manning, **Maxwell** & Moore
Moeller Instr. Co.
Negus, T. S. & J. D.
Rahm Instr., Inc.
Raytheon **Mfg.** Co.
Servonic Insts., Inc.
Trimount Instr. Co.
Uehling Instr. Co
U. S. Gauge Div.

DETECTOR CARS, For Testing Rails in Trace, see Flaw Detector Cars

DETECTORS, Alpha Ray, Beta Ray, Gamma Ray, etc., see Radioactivity Instruments

DETECTORS, Benzol, see Gas Analyzers

DETECTORS, Carbon Monoxide, see Gas Analyzers

DETECTORS, Combustible Gas, see Gas Analyzers

DETECTORS, Crystal, see Crystals

DETECTORS, Electrical Ground, see Ground Detectors

DETECTORS, Explosion, see Combustion Safeguards

DETECTORS, Fire, see Fire Detectors

DETECTORS, Flaw, see Flaw Detectors

DETECTORS, Gamma Ray, see Radioactivity

DETECTORS, Gas including Methane and Mine Gases, see Gas Analyzers

DETECTORS, Hazardous or Poisonous Gas, see Gas Analyzers

DETECTORS, Hydrogen Sulphide, see Gas Analyzers

DETECTORS, Infrared, see Infrared Detectors

DETECTORS, Leak, see Leak

DETECTORS, Lie see Polygraphs

DETECTORS, Mercury Vapor, see Gas Analyzers

DETECTORS, Metal, see Metal Detectors

DETECTORS, Methane, see Gas Analyzers

DETECTORS, Microwave, see Antennas, also Radiation Pickups

DETECTORS, Mine Gases, see Gas Analyzers

DETECTORS, Neutron, see Radioactivity

MAYMER

PRODUCTS OF
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BEAUTY
DURABILITY

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AND DIALS
FOR INSTRUMENTS
SYL-O-WHITE OR SYL-O-ETTE
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NAME PLATES
AND PANELS
SYL-O-WHITE, SYL-O-ETTE
ENGRAVED, SILK-SCREENED

THE MAYMER CORPORATION
1961 W. 112 St., Cleveland 2, O.

For more information circle 95 on inquiry card.

DETECTORS, Oxygen Deficiency, see Gas Analyzers

DETECTORS, Pin Hole, see Flaw Detectors

DETECTORS, Radiation or Radioactivity (Dosimeters), see Radioactivity

DETECTORS, Radium, see Radioactivity

DETECTORS, Sound, see Sound

DETECTORS, Vibration, see Vibration

DETECTORS, Voltage, see Null Detectors, also Voltmeters

DETONATION INDICATORS

Bendix, Eclipse-Pioneer
Billey Electric
Electro Products Labs.
Engineering Res. & Devel.
Photocon Research
Rowe Engrg. Co.
Rutico, Inc.
Sperry Gyroscope
Topp Industries
Trimount Instr. Co.

DEW POINT INSTRUMENTS, see Humidity

DIAL FACES

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Acromark Co.
Acton Labs.
Allegheny Plastics
Allied Engraving
Allied Products Div.
Amer. Emblem Co.
Amer. Laubscher
Amer. Name Pl. & Mfg.
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Bache & Company, Semon
Bastian Bros.
Bodnar Industries
Borel & Co.
Brady, Co., W. H
Burlington Instr
Can. Rad. & Uran.
Carroll Co.
Ceramatronics, Inc.
Chart Production Co.
Chicago Dial
Chicago Thrift Etching
Cleveland Metal Specs.
Conn-Craft Co.
Continental-Diamond Fibre
Corning Glass Works
Croname, Inc.
Crosby Valve & Gauge
Dale Products
Daven Company
Dearborn Glass Co
Detroit Name Plate Co.
Dialight Corp.
Dietz Co.
Dura Plastics
Eastern Etching & Mfg
Electro-Chemical Engrg. Co.
Electronics, Inc.
Elgin Natl. Watch
Erie Resistor
Etched Products Co.
Felsenthal & Sons
Formica Co.
Gadgets, Inc
Gallien, R. P.
GE, Chem. Dept.
Genl. Etch. & Mfg. Co.
General Radio Co.
Glass Products Co.
Gorton Machine Co
Grammes & Sons
Origoleit Co.
Gurley, W. & L. E.
Hamilton Watch
Helipot Div.
Hermes Engravers
Hopp Press, Inc.
Hurd, H. H.
Johnson Glass Co.
Leyse Aluminum
Manhattan Dial Mfg. Co.
Marine Compass Co.
Marsco Mfg. Co.
Marsh Corp., Jas. P.
Maryland Etching Co.
Mayer Co., Geo. J.
Maymer Corp.
Meriam Instr. Co.
Metalphoto Corp.
Mica Insulator
Miller Dial & Name Pl.
Modern Tech. Supply
Moss & Co.
Motson Co.
Mutual Elect. Industries
Natl. Time & Signal
New Haven Clock
Newmatic Corp.
North Shore Nameplate, Inc
O'Hara Waltham Mfg
Palm Bros. Decal.
Parisian Novelty Co
Park Nameplate Co
Patterson Co., Wayne D
Pax Electronics
Penn Optical & Instr.
Phaostron Co.
Photo Chemical Prods
Photoplating Co.
PIC Design Corp.
Precise Measmts. Co.
Prec. Thermom. & Insts.
Printloid, Inc.
Rawson & Evans
Reeves Instr. Co
Regal Instr. Co
Regal Plastic Co.
Renick Co.
Reeves Instr. Corp.
Richardson Co.
Rohm & Haas
Sampson Chem. & Pigm.
Sandy Mfg. Co.
Scheidl Mfg. Co
Scientific Instr. Co.
Scovill Mfg. Co
Seton Name Plate
Signal Indicator Corp
Sillcocks-Miller
Spencer Mfg. Co.
Sun Dial Corp.
Swanson Engrg. Co
Tablet & Ticket Co
Techniques Inc
Trans-Gel Products
U. S. Gauge Div.
U. S. Radium Corp.
Valley-National
Vallorbs Jewel Co.
Waldom Electronics
Waterbury Co's
Watertown Mfg
Western Lithograph
Whitehead & Hoag Co.
Zenith Optical Lab.

DIAL LIGHTS, see Pilot Lights

DIAL MICROMETERS, see Dimensional Gages

DIAL THERMOMETERS, see Thermometers, Dial

DIALS, Multiple Revolving

Ackerman Engravers
Acromark Co.
Acton Labs.
Allied Engraving
Amerac, Inc.
Automatic Electric
Bodnar Industries
Borg Equipt. Div.
Carroll Co., J. B.
Chicago Thrift-Etching
Croname, Inc.
Ford Engrg. Co.
Gurley, W. & L. E.
Helipot Corp.
Hopp Press, Inc.
Johnson Co., E. F.
Millen Mfg. Co.
National Co.
PIC Design Corp.
Pax Electronics
Reeves Instr. Corp.
Research Instr. Co.
Rex Rheostat Co.
Sillcocks-Miller
U. S. Radium Corp.
Waldom Electronics Inc.
Whitehead & Hoag Co.

DIALS and POINTERS, Fluorescent

Ackerman Engravers
Allied Engraving
Automation Equipt. Inc.
Borg Equipt. Div.
Can. Rad. & Uran.
Carroll Co.
Croname, Inc.
Dale Products
Hamilton Watch
Johnson, E. R.
Link Aviation
Marine Compass Co.
Maryland Etching Co.
Maymer Corp.
Millen Mfg. Co.
Miller Dial & Name Pl.
Phaostron Co.
PIC Design Corp.
Precision Tube Co
Sampson Chem. & Pigm.
Scientific Instr. Co.
Sun Dial Corp.
Superior Tube
Switzer Bros., Inc.
U. S. Radium Corp
Valley-National
Waldom Electronics
Waterbury Co's

DIAMOND CONTACT POINTS, for Gaging

Continental Mach., Inc.
Crafts Co., Arthur A.
Dessau, Maurice S.
Gatti, Aurele M.
Industrial Abrasives
Keller & Co.
Powers, Geo.
Precision Diamond Tool
Standard Gage Co.
Swedish Gage
Waltham Precision Tool
Willey's Carbide Tool

DIAMOND HARDNESS, Penetrators, see Hardness

DIAMOND TOOLS, including Styli

Alfa Amer. Corp.
Allied Products Div
Balloffet-Vianney
Bausch & Lomb
Bird & Co.
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Dessau, Maurice S.
DoAll Co.
Duotone Co.
Edna Lite Co.
Engis Equipt. Co.
Ex-Cell-O Corp.
Ferner Co.
Fineisen, A. R.
Fish-Schurman
Gallien, P. R.
Gatti, Aurele M.
GE
Gorton Machine Co
Greenlee Co.
Hamilton Watch
J & S Tool Co.
Jadow Inc.
Keller & Co.
Modern Tech. Supply
Moser Jewel Co.
Powers, George
Prec. Diamond Tool Co
Raybestos-Manhatten
Tetrad Co.
Torrance Glass Color Wks.
Vallorbs Jewel Co.
Wall Colmonoy Co.
White Dental Mfg.
Willey's Carbide Tool

DIAMONDS, Industrial, including Dust

Balloffet-Vianney
Crafts Co., Arthur A.
Dessau, Maurice S.
Elgin Natl. Watch
Engis Equipt. Co.
Ferner Co., R. Y.
Fish-Schurman
Gallien, R. P.
Gatti, Aurele M.
Goodwin, Edwin J.
Greenlee Co.
Krengel, Maurice
Prec. Diamond Tool Co
Rough Diamond Co.
Super Cut, Inc.
Vallorbs Jewel Co.
Wall Colmonoy Co
Willey's Carbide Tool

DIAPHRAGM TESTING MACHINES

Dice Co
Kahn & Co.
Krouse Testing Mach.

DIAPHRAGMS, Leather, Fabric and/or Rubber

Acushnet Process Co.
Amer. Hard Rubber Co.
Amerail Co., Inc.
Armstrong Cork
Atlantic India Rubber
Auburn Mfg.
Bacon Industries
Bellofram Corp.
Blossom Mfg.
Bristol Co.
Chicago Rawhide Mfg.
Cleveland Controls
Cooper Co., Clark
Daniels, Inc.
Detroit Gasket & Mfg.
Excelsior Leather Mfg.
Garlock Packing Co.
Genl. Tire
Goodrich Co., B. F.
Goodyear Tire
Graton & Knight
Hamilton Rubber Mfg.
Hays Corp.
Instruments Inc.
Kendall Controls
LeRoy Maugans Co.
Lord Mfg.
Mechanical Leather Co.
Mica Insulator
New York Rubber
Parker Stearns & Co.
Raybestos-Manhattan
Resistoflex Corp.
Reynolds Gas Prods. Co.
Staver Co., Inc.
Superior Meter Co.
Trerice Co., H. O.
U. S. Gasket Co.
U. S. Rubber
Vulcan Rubber Prods.
Westinghouse Air Brake Co

DIAPHRAGMS, Metal

Amer. Silver Co.
Atlas Valve Co.
Baker & Co.
Bendix, Eclipse-Pioneer
Bendix Fries
Blossom Mfg.
Bristol Co.
Buhl Optical
Burton Mfg. Co.
Chicago Metal Hose
Cleveland Controls, Inc.
Colvin Labs., Inc.
Cook Electric Co.
Cooper Co., Clark
Datran Electronics
Edmund Scientific
Flexonics Corp.
Fulton-Sylphon Div.
General Plate Div.
Giannini & Co.
Hathaway Instr. Co.
Instruments, Inc.
Jordan Reg. Corp.
Keystone Carbon Co.
Kollsman Instr. Div.
Lackner Co.
Lewyt Corp.
Lynn, Robert M.
Mallory & Co., P. R.
Maymer Corp.
Molded Insulation
New Eng. Steam Gauge Co
Patterson Co., Wayne D.
Phosphor Bronze Smeltg.
Sherman & Co.
Staver Co., Inc.
Telex, Inc.

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100% charge
thin-blade
phosphor bronze
The Ultimate in Fine
ECONOMY BLADES

—STOCK SIZES—
4¾" OD. .012" rim $12.50 ea.
4¾" OD. .016" " $16.50 ea.
4¾" OD. .025" " $21.50 ea.
hole ½"-⅝"-¾"

These are the milled rim type, with SIDE RELIEF, designed for deep cuts.

Specification manufacture to 4¾" O.D., rim .025" thick.

EDWIN J. GOODWIN
MANUFACTURER
Box No. 7711-B
HOUSTON 7, TEXAS

For more information circle 96 on inquiry card.

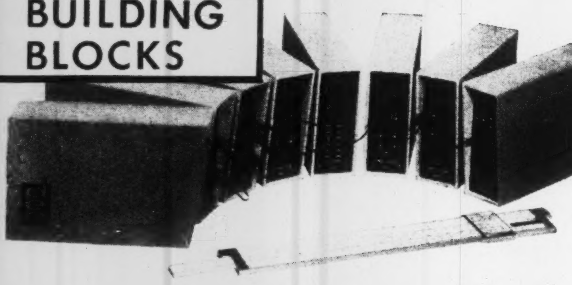
DIELECTRIC PROPERTIES TESTERS

- High Voltage AC Breakdown Testers —Types PA
- Arc Resistance Testers Types ART-1, ART-2.
- Megohmmeters for Insulation Resistance Type L Series.

Write for complete catalog

Industrial Instruments Inc
89 Commerce Road, Cedar Grove, Essex County, N. J.

For more information circle 97 on inquiry card.



dec BUILDING BLOCKS

5-Megacycle Digital Test Equipment Offers Flexibility for Years of Service . . .

Transistorized Models Include:

- Inverter — 102
- Diode — 110
- Flip-Flop — 201
- Delay — 301
- Clock — 401
- Pulse Amplifier — 601
- Pulse Generator — 410
- Tube Pulser — 650
- Level Amplifier — 666
- Relay — 801

All models use the same power voltages (−3v, −15v and +10v) thus allowing any arrangement of building blocks in the mounting panel. All logical signals are available on the graphic front panels. Logical interconnections are made with patch cords using miniature stacking banana jacks. Standard power connections are made from the back.

The outstanding flexibility of DEC Building Blocks makes them useful for many types of computer applications.

DEC Catalog contains complete descriptions and prices. It is available from:

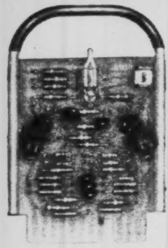
digital equipment corporation

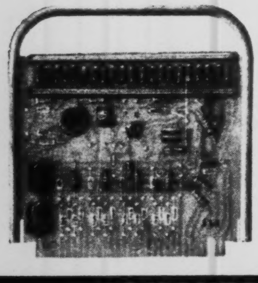
engineering and manufacturing

MAYNARD, MASSACHUSETTS

For more information circle **98** on inquiry card.

BUILD YOUR SYSTEM with 3C-PAC® Digital Modules





- All **PACs** are transistorized, compact, low power, plug-in, printed circuits.
- **M-PACs:** DC to 100KC modules. Flip-flops, pulse amplifiers, gates and associated static circuits. Write for illustrated 20-page Catalog M.
- **T-PACs:** One megacycle modules. Dynamic circuits, plug-in power supply. Series includes a random access **magnetic core memory.** Write for illustrated 16-page Catalog T.
- **Computer Control** offers complete services for problem analysis and digital system design, construction, programming and operation.

3C COMPUTER CONTROL CO., inc.
92 BROAD STREET • WELLESLEY 57 • MASS. • CE-5-6220
2251 BARRY AVE. • LOS ANGELES • CALIF. • GR-8-8705

For more information circle **99** on inquiry card.

Trerice Co., H. O.
U. S. Gauge Div.
U. S. Indestruc. Gasket

DIELECTRIC MATERIALS

Acme Wire Co.
AMP, Inc.
Amer. Lava Corp
Auburn Mfg. Co
Baird-Atomic
Bakelite Div.
Brand & Co.
Carbide & Carbon
Centralab Div.
Cont.-Diamond Fibre
Corning Glass Works
Crane Packing Co
Crowley & Co.
Dow Chemical
Durez Plastics
Durlite Plastics
Emerson & Cuming
Erie Resistor
Fish-Schurman
Formica Co.
GE Spec. Electronic
G E Silicone Prod. Dept.
General Aniline & Film
General Chemical Div.
Genl. Ceram. & Steatite
Gulton Industries
Insulation Mfrs. Corp.
Johnson Co., E. F.
Lamtex Industries
Macallen Co.
Metal & Thermit Corp
Mica Insulator Co.
Minnesota M'ning & Mfg.
Mitchell Rand Insul.
Molex Products
Mycalex Corp. of Amer
Natl. Varnished Prods
Natl. Vulcanized Fibre
Precision Paper Tube Co
Polymer Corp.
Printloid, Inc.
Radiation Res. Corp
Resistoflex Corp
Rex Corp.
Richardson Co.
Rohm & Haas
Silicones Div.
Slaughter Co.
Steatite Div.
Spaulding Fibre Co
Stupakoff Div.
U. S. Gasket Co
U. S. Rubber
U. S. Stoneware Co
Watertown Mfg.
Werner Co., Inc., R. D
Wilmington Fibre
Zophar Mills, Inc.

DIELECTRIC PROPERTIES TESTERS

Antenna Research Lab
Assoc. Research, Inc.
Aviation Engrg. Corp
Boonton Radio
Central Res. Labs.
Comtor Co.
Custom Scientific Insts
Davenport Mfg.
Del Electronics
Eberbach & Sons
Electronic Devel. Lab
Erdco Engrg. Co.
Erie Resistor
Federal Prods. Corp
Federal Telephone & Radio
Fielden Instr. Div.
GE, Apparatus Sales
General Instr. Co.
General Radio
Hallikainen Instruments
Hewson Co.
Indust. Instruments
Industrial Test Equipt.
Instrument Labs.
Jarco Services, Inc.
Kahn & Co.
Keithley Instrs., Inc.
Leeds & Northrup
Lepel High Freq. Labs
Magnaflux Corp.
Manson Labs.
Marconi Instruments
Martindale Electric
Opad Electric Co.
Peschel Electronics
Precise Measmts. Co
Radiation Res. Corp.
Refrigeration Systems
Robertshaw-Fulton
Roller-Smith
Sargent & Co
Scient. Inst. Dev. Lab.
Seedburo Equipt. Co.
Sherron Metallic Corp.
Simmonds Aerocessaries
Slaughter Co.
Standard Electric
Sylvania Elect. Prods.
Testing Machines, Inc.
U. S. Testing Co.
Weston Instr.
Winslow Co
Yellow Springs Instr.

DIE-SETS, PRECISION

Jadow Inc.
Pratt & Whitney
Sylvania Elect. Prods.
Woodruff & Stokes

DIES, Diamond

Allied Products Div
Balloffet-Vianney
Crafts Co., Arthur A
Fineisen, A. R
Gallien, R. P.
Jadow Inc.
Keller & Co.
North Amer. Philips

DIES, Metric

Bachmann Co., Eric R
Balloffet-Vianney
Bayside Watch Tool Co
Ferner Co.
Fineisen, A. R
Gallien, R. P
Hirschmann Co
Jadow Inc.
Pratt & Whitney
Progressive Service
Swiss Amer. Jewel Bear.

DIES, Sapphire, Wire Drawing

Balloffet-Vianney
Bird & Co.
Dessau, Maurice S.
Dixon, Inc.
Eastern Specialty Co.
Elgin Natl. Watch
Fineisen, A. R.
Gallien, R. P.
Gatti, Aurele M.
Industrial Jewel Bearing
Keller & Co., L. H.
Powers, George
Vallorbs Jewel Co.
Warebro Jewel Co.
Willey's Carbide Tool
Worley Jewel Co.

DIFFERENTIAL PRESSURE, see Pressure Differential

DIFFERENTIAL TRANSFORMERS, see Displacement Pickups, Differential Transformer

DIFFRACTION GRATING, see Grating, Diffraction

DIGITAL BUILDING BLOCKS, including Computer Components

Computer Control Co.
Digital Equipt. Corp.
Electro Precision Corp
Engineered Electronics
Epsco, Inc.
Harvey-Wells Electrs
Mack Electronics

DIGITAL READOUT INDICATORS (see also Data Processing)

Aero Electronics
Amer. Mach. & Foundry,
  Electronics Div.
Anatran Engrg. Corp
Anelex Corp.
Assembly Products
Austin Company
BJ Electronics
Baird-Atomic
Bendix-Pacific
Benson-Lehner Corp
Berkeley Div.
Borg Equipt. Div.
Brush Instruments
Burroughs Electronics
Cal-Ohm Labs.
Computer-Measmts. Corp
Control Data Corp.
Dayton Instruments
Detectron
Durant Mfg. Co.
Dymec, Inc.
Dynametrics Corp.
Dynapar Corp
Electro Instruments
Electro-Pulse, Inc
Electrol, Inc.
Electronic Control Systems
Electronic Engrg. Co.
Engineered Electronics
Epsco, Inc.
Erie Instrumentation
Fairbanks, Morse & Co
Farrand Optical
Fischer & Porter Co.
Franklin Electronics
Gilmore Industries
Gurley, W. & L. E.
Hanson-Gorrill-Brian
Helipot Div.
Hycon Electronics
I-L-S Instr. Corp.
Ill. Testing Labs.
Industrial Control Co.
Indust. Electronics Engrs
Kaiser Aircraft & Elect.
Kearfott Co., Inc.
Kleinschmidt, Inc.
Moseley Co.
Nankervis Co.
Neutronics Research
Non-Linear Systems
North Amer. Philips
Northrop Anaheim
Nuclear Electronics
Panellit, Inc.
Parabam, Inc.
Performance Measmts.
Potter Aeronaut. Corp.
Potter Instr. Co.
Probescope Co.
Radiation, Inc.
Radiation Instr. Dev. Lab
Ram Meter, Inc.
Ransom Research
Rutherford Electronics
Soroban Engrg.
Special Instruments Lab.
Stavid Engrg.
Systron Corp.
Taller & Cooper
Telecomputing Corp
Ultrasonic Corp.
Union Switch & Signal
Wang Labs
Westinghouse Electric
Weston Instrs.
Westronics, Inc.

DIGITAL RECORDERS, see Printers

DIGITALIZERS, see Converters, Analog to Digital

DILATOMETERS
Ace Glass
Amer. Instr. Co
Bristol Co.
Can. Rad. & Uran
Dietert Co.
Ferner Co.
Gaertner Scientific
Gilmore Industries
Industrial Electronics
Instrument Devel. Labs
Jarrell-Ash
Leeds & Northrup
Leitz, Inc.
Maveg Mach. Sales
Olsen Testing Machine
Rockwell Co., Stanley P
Scientific Glass App.
Sylvania Elect. Labs.
Zeiss, Inc., Carl

DIMENSIONAL GAGES, Electronic, Including Comparators, Micrometers (see also Thickness Gages)
Aero Electronics
Arizona Tool & Die Co
Arlin Products
Assoc. Research, Inc.
Autom. Timing & Control
Automation Gages
Boonton Radio
Branson Instruments
Bristol Co.
Brown & Sharpe
Brush Instruments
Cleveland Instr. Co
Colvin Labs
Consolidated Avionics
Control Components Co
Curtiss-Wright
Daytronic Corp.
Decker Corp.
Dice Co.
DoAll Co
Donner Scientific
Electric Eye Equipt.
Electro Products Labs.
Electronic Controls, Inc
Electronic Control Systems
Engis Equipt. Co
Ercona Corp.
Federal Prods. Co
General Electronic
Hastings-Raydist
Hathaway Instr. Co
Hickok Electcl. Instr
Indikon Co.
Industrial Electronics
Indust. Gauges Corp.
Indust. Nucleonics Corp
Instr. Devel. & Mfg. Corp
Kahn & Co.
Kaiser Aircraft & Elect
Lear, Inc.
Metrol Inc.
Nuclear Research Corp
Opto-Metric Tools
Orban Co., Kurt
Panoramic Radio Co
Phaostron Co.
Photoswitch, Inc
Poole Instruments
Portman Instr. Co
Pratt & Whitney
Radial Metal Prod
Ramsey Engrg. Co
Robertshaw-Fulton
Rockwell Engrg. Co
Schaevitz Engineering
Sensitive Res. Instr
Sheffield Corp.
Sheffield Western
Sherron Metallic
Size Control Co.
Standard Electric
Std. Electronic Res
Stevens-Arnold
Swedish Gage
Taft-Peirce Mfg. Co.
Testing Machines, Inc
Unit Process Assem
Van Keuren Co.
Warner & Swasey Res
Wilmotte, Inc.

DIMENSIONAL GAGES, Mechanical, including Adjustable Length, Bore, Caliper, Center, Coating Thickness, Concentricity, Cylinder, Dial, Drill Grinding, End Measure, Foot Blocks, Gage Blocks, Height, Linear Depth, Micrometer, Pipe, Piston Ring, Pitch Diameter, Plug, Profile, Radius, Taper, Thickness, etc. (see also Thickness)
ACF Electronics
Ace Glass
Acme Industrial
Acme Scientific
Adde & Co.
Aero Electronics
Airborne Instruments
Alina Corp.
Allen Gauge & Tool
Amer. Gage Co.
Amer. Instr. Co.
Amer. Measuring Insts
Amer. Meter Co.
Amer. Tradair Corp
Ames Co.
Amthor Testing Instr
Ann Arbor Instr. Wks
Anton Electronic Labs
Applied Research Labs
Arizona Tool & Die Co
Arlin Products
Arma Corp.
Ashton Valve Co.
Authorized Mfrs. Service
Autom. Timing & Controls
Autotron Co.
Bailey Meter Co.
Baldwin-Lima-Hamilton
Bausch & Lomb
Berkshire Labs.
Bethlehem Apparatus
Branson Instruments
Bristol Co.
Brown & Sharpe
Brush Instruments
Bryant Chucking Grinder
Buffalo Scale Co.
Builders-Providence
Bush Associates
Cadillac Gage Co.
Cody & Co.
Can. Rad. & Uran
Carson Micrometer
Central Scientific
Chatillon & Sons
Chicago Dial Ind. Co
Circle Gage Co.
Cleveland Instr. Co
Computer Instr. Co.
Comtor Co.
ConRay Corp.
Control Devices Inc
Corning Glass Works
Cox Instruments
Crafts Co., Arthur A.
Crosby Valve & Gage
Curtiss-Wright
Custom Scientific Insts
Datran Electronics
Daytronic Corp.
Davidson Mfg. Co.
Dearborn Gage Co.
Dearborn Scientific
Decker Aviation
Deltronic Corp.
Deming Indicator
Detecto Scales
Dice Co
Dixon, Inc.
DoAll Co.
Donner Scientific
Edin Electronics
Eitzen Co.
Electro Products Labs
Electronic Control Systems
Electronic Controls, Inc
Electronic Products Co
Elgin Natl. Watch
Engineers Specialty Div
Engis Equipt. Co
Ercona Corp.
Esterline Angus
Exact Weight Scale
Federal Prods. Corp
Ferner Co.
Fielden Instr. Div
Fischer & Porter
Fonda Gage Co.
Forro Scientific
Foxboro Co.
Gaertner Scientific
Gardner Lab.
Gem Instrument
Genales, Andres
General Cybernetics
GE, Apparatus Sales
GE, Metall. Prods. Dept
GE, X-Ray Corp.
Gilmore Industries
Glogau & Co.
Gordon Co., Claud S
Graham-Mintel Instr
Greenfield Tap & Die
Griswold Mfg. Co.
Gulton Industries
Hamilton Watch Co
Hanson-Gorrill-Brian
Hathaway Instr. Co
Hays Corp.
Henson Co.
Hillyer Instr.
Hirschmann Co.
Ideal- Aerosmith
Ill. Testing Labs.
Ill. Tool Works
Indicating Calipers Co.
Indust. Electronics (Mass.)
Industrial Electronics
Industrial Gauges Corp
Industrial Nucleonics
Industrial Prods. Div.
Industrial Devel. Labs
Instruments, Inc.
Jadow, Inc.
Jan Hardware Mfg.
Jansson Gage Co.
Jerpbak-Bayless
Jessup Engrg. & Devel.
Johnson Gage Co.
Kahn & Co.
King Instrument Co.
Koehler Instr. Co.
Krouse Testing Machine
Lawrence & Hill
Leupold & Stevens
Lewis Engrg. Co.
Lincoln Park Tool
Link Engrg. Co.
Lufkin Rule Co.
M & G Instr. Co.
Magnaflux Corp.
Magnetic Gauge Co.
Manning, Maxwell & Moore
Marsh Corp., Jas. P.
Marshall Co.
Maveg Machine Sales
Merz Engrg. Co
Metron Instr.
Metzger & Son
Micro-Master Co.
Micro Metrical Mfg.
Millers Falls Co.
Minatron Corp.
Moore Products
Morse Co., H. F.
Mueller Lab.
Munsell Color Co
Myer Corp.
National Broach & Mach
Neise, Karl A.
Nilsson Gage Products
North Amer. Instr.
North Amer. Philips
Nuclear Corp. of Amer.
Nuclear Research
Ohmart Corp.
Optical Gaging Prods
Opto-Metric Tools
Orban Co., Kurt
Perkin-Elmer
Petrometer Corp
Phoenix Prec. Instr
Photocon Research
PIC Design Corp
Poole Instruments
Portman Instr. Co
Pratt & Whitney
Precision Gage & Tool
Precision Scientific
Prec. Thermom. & Insts
Progressive Service Co
R. & M. Mfg. Co.
Radial Metal Prod.
Radioactive Prods. Inc
Reliable Instr. Co.
Republic Gage Co.
Reliant Industries
Rimat Tool Co.
Robertshaw-Fulton
Rochester Mfg. Co.
Rockwell Engrg. Co
Rowe Engrg. Co.
Rutico, Inc.
Ryan Tool & Engrg
Schaevitz Engineering
Scherr Co.
Scherr Optical Tools
Scientific Enterprises
Scientific Instr. Co.
Scott Testers
Sealol Corp.
Servonic Insts.
Sheffield Corp.
Sheffield Western
Simplex Valve & Meter
Simpson Electric
Size Control Co.
Slocomb Co.
Spiedel & Co.
Sperry Products
Standard Electric
Standard Electronic
Standard Gage Co
Starrett Co.
Statham Co.
Stocker & Yale
Streeter-Amet
Sturdy Tool & Gage
Summers Gryoscope
Sunshine Scientific
Swedish Gage
Taft-Peirce
Taper Micrometers
Telectronics Labs.
Tensitron, Inc.
Testing Machines, Inc.
Three Point Industries
Thwing-Albert
Ti-Pi Co.
Toledo Scale Co
Tracerlab Inc.
Trerice Co., H. O.
Trimount Instr. Co
U. S. Expansion Bolt
U. S. Radium Co.
Union Tool Co
United Engineers
United Prec. Prods
Van Keuren Co.
Vapor Recovery Systems
Victor Laboratory
Viking Instruments
Vinco Corp.
Wallace & Tiernan
Waltham Dial Gage
Warner & Swasey Res
Warren-Knight
Webber Gage Co
Weksler Instrs.
Welch Mfg. Co., W. M
West & Dodge Thread
Whittington Pump
Wiancko Engrg. Co
Wilmotte, Inc.
Woodworth Co.
Worley Jewel Co
Zeiss, Inc., Carl

DIMENSIONAL GAGES, Optical including Comparators, Interferometers, Micrometers, Projectors, Telescopic
Abrams Instr. Co
Acme Industrial
Acme Scientific
Align-A-Scope, Inc
Alpha Amer. Corp
Amer. Instr. Co.
Amer. Meas. Instr.
Amer. Optical
Ann Arbor Instr. Works
Arizona Tool & Die Co.
Askania Reg. Co
Askania-Werke A. C.
Automation Gages
Avion Div.
Bachmann Co., Eric R
Baird-Atomic
Bausch & Lomb
Bell & Howell
Bray Optical
Bristol Co
Bronoptics Co
Brown & Sharpe
Brush Instr-
Bushnell Co
Cambridge Instr. Co
Carroll Co.
Clark & Sons

Non Destructive and Physical Testing and Measuring Instruments for
quality control

CARSON-DICE ELECTRONIC MICROMETERS
Direct measurement of thickness to .000020—not a comparator. Pressureless measurement—eliminates "feel" as a source of error. Applicable to hard or soft materials, conducting or nonconducting. (Ideal for measuring fragile or compressible materials or parts). Hand operated and automatic motor driven models available.

METAL SORTERS
Automatic or manual high-speed sorting of metal parts by 10 metallurgic characteristics. Insures uniform quality, sorts up to 300 pieces per minute. Salvages mixed lots non-destructively, and is applicable to raw stock, semi-finished or finished parts—any size.

ULTRASONIC METROSCOPE
Measures wall thickness from one side only. Detects internal defects non-destructively in sheet, plate, and flat stock. Locates imperfect bond between clad metals.

MICROHM METER
Measures electrical resistances as low as 1 Microhm (.000001 ohms). Portable, 5 range instrument for field or shop use. 2% accuracy. Self-contained power supply. Measures contact resistance in large circuit breakers without disassembly. Quality control of small electrical assemblies and for inspection of incoming raw materials. Basic instrument for checking "cleanliness" of aluminum prior to spot welding.

CONDUCTOR IDENTIFIER
A code signalling transmitter for identifying up to 4 unidentified conductors or cables where opposite ends are far apart.

and many other testing and measuring instruments. Whatever your test problems WRITE DICE

ULTRASONIC
HYDRAULIC
HARDNESS
RESISTANCE
MAGNETIC COUNTERS
HYDROSTATIC
DUCTILITY
POLARITY
METAL DETECTORS
PRESSURE TRANSDUCERS
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J. W. DICE COMPANY
16 HIGHWOOD AVENUE

ENGLEWOOD, N. J.

For more information circle **100** on inquiry card.

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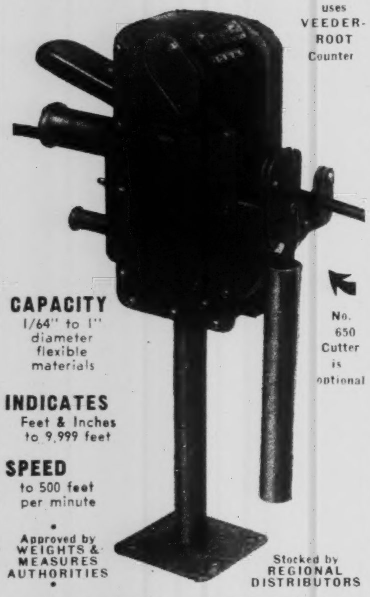
Olympic Model 600 is ACCURATE-EFFICIENT



CAPACITY 1/64" to 1" diameter flexible materials

INDICATES Feet & Inches to 9,999 feet

SPEED to 500 feet per minute

Approved by WEIGHTS & MEASURES AUTHORITIES

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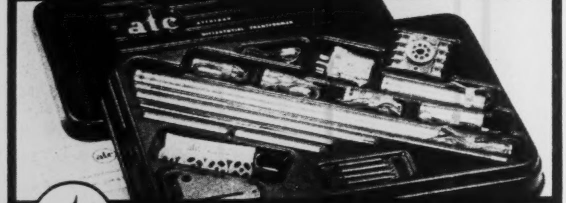
Olympic Instrument Laboratories
Dept. 91, VASHON, WASHINGTON

For more information circle 101 on inquiry card.

FOR THE DEVELOPMENT OF RELIABLE AUTOMATIC CONTROL AND COMPUTING DEVICES



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For more information circle 102 on inquiry card.

Coleman Engrg. Co.
Compar Instr. Co.
Cal-Astro Optical Labs
Cambridge Thermionic
Custom Scientific Insts. Inc.
Davidson Mfg.
DoAll Co.
E & S Optical
E & W Optical
Eder Instr. Co
Edmund Scientific
Electro-Mec Lab
Electronic Res. Labs
Electronic Spec. Co.
Engineers Specialty Div.
Engis Euipt. Co.
Ercona Corp.
Farnsworth Electronics
Farrand Optical
Fecker, Inc.
Federal Prods. Corp
Ferner Co
Fish-Schurman
Gaertner Scientific
Gage Co
Gordon Enterprises
Graf-Apsco
Griswold Mfg. Co.
Gurley, W. & L. E.
Hacker & Co.
Hausser & Son
Helio Instr. Co.
Henson Co.
Hillyer Instr. Co
Hirschmann Co.
Hyde Instr. Co.
Instrument Devel. Labs
Instrumentation Assoc.
Jarrell-Ash
Jones & Lamson Mach
Keuffel & Esser
Kollmorgen Optical
Lab. Optical
Leitz Inc
Lenox Instrument Co.
Link Aviation
Lufkin Rule Co.
Mason Instr. Co.
Menlo Research Lab.
McPherson Prec. Insts
Meyer-Opticraft
Natl. Instr. Co.
Opplem Co., Inc.
Optical Development Corp
Optical Gaging Prods.
Opto-Metric Tools
Optron Lab.
Palos Optical
Pan-technics, Ltd.
Penn Optical & Instr
Perkin-Elmer
Phoenix Prec. Instr.
Photogrametry, Inc.
Polarizing Instr. Co
Portman Instr. Co.
Pratt & Whitney
Precision Scientific
Radial Metal Prod
Ramsey Engrg. Co
Rudolph & Sons
Ruska Instr. Corp
Scherr Optical Tools
Schneider-Cogswell
Sheffield Corp
Sheffield Western
Std. Electronic Res.
Stocker & Yale
Swedish Gage
Testing Machines, Inc.
Tinsley Labs.
Unertl Optical
Van Keuren Co.
Webber Gage Co.
Wild Heerbrugg
Wilder, Inc.
Zeiss, Inc., Carl

DIMENSIONAL GAGES, Pneumatic, including Comparators

Dearborn Gage Co.
Federal Prods. Corp
Gaertner Scientific
Moore Products
Pratt & Whitney
Ramsey Eng. Co.
Sheffield Corp.
Sheffield Western
Swedish Gage
Taft-Peirce

DIMENSIONAL GAGES, Running Length including Wire, Cable, and Flexible Materials

Durant Mfg. Co
Olympic Instr. Labs.

DIMENSIONAL GAGES, Surface Finish, including Surface Indicators

Acme Industrial
Allna Corp.
Amer. Meas. Insts.
Amer. Optical
Ames Co
Arlin Products
Autom. Timing & Controls
Bausch & Lomb
Blake Co.
Bristol Co
Brown & Sharpe
Brush Instrs.
Buehler, Ltd
Clevite Res. Center
Compar Instr. Co
Comtor Co.
Con-Ray Corp.
Dearborn Gage Co.
DoAll Co.
Edin Electronics
Electric Eye Equipt.
Electronic Prods. Co
Engis Equipt. Co.
Ercona Corp.
Federal Prods. Corp.
Fielden Instr. Div.
Gar Prec. Parts, Inc.
GE, Apparatus Sales
Genales, Andres
Hirschmann Co.
Industrial Electronics
Jansson Gage Co.
Kaye Devel. Co.
Link Engrg. & Mfg.
Lufkin Rule Co
Micrometrical Mfg.
Millers Falls Co
National Instr. Co
Nilsson Gage Products
Opplem Co.
Opto-Metric Tools
Optron Lab.
Orban Co., Kurt
Palos Optical Co.
Penn Optical & Instr.
Perkin-Elmer
Phototron Instr. Corp.
Physicists Res. Co.
Precision Scientific
Robertshaw-Fulton
Schaevitz Engineering
Scherr Co.
Scherr Optical Tools
Sheffield Corp.
Simpson Electric
Size Control Co.
Std. Gage Co.
Starrett Co.
Stocker & Yale
Sturdy Tool & Gage
Surface Checking Gage
Swedish Gage
Taper Micrometers
Thwing-Albert
Whittington Pump
Williamson Devel. Co.
Zeiss, Inc., Carl

DIODE TEST SETS

Amer. Mach. & Foundry
Berkshire Labs.
Cubic Corp.
Datascan Inc.
Davenport Mfg.
Dunn Engrg.
Franklin Electronics
Fretco, Inc.
General Electronic
Hydro-Aire Inc.
Kahle Engrg. Co
Kay Electric
Manson Labs.
Magnetic Amplifiers, Inc.
Monroe Calc. Mach. Co.
Neutronics Research
Northam Electronics
Pacific Semiconds, Inc.
Polyphase Instr.
Radio City Products
Reiner Electronics
Scientific Specialties
Sonex, Inc.
Technitrol Engrg. Co.
Tarc Electronics
Teletronics Lab., Inc.
Transistor Applications
Transistor Devices
Wallson Associates
Waters Mfg.
Westronics, Inc.

DIODES, Germanium

Amperex Electronic
Arnhold Ceramics
Bendix Aviation Corp.
Berkshire Labs.
Bogue Electric Mfg.
CBS-Hytron Div.
Centralab Div.
Engineered Electronics
GE, Electronics Div.
Hughes Prods. Div.
Hydro-Aire, Inc.
Industro Transistor Corp
Intelex Systems
International Rectifier
Kemtron Electron Prods.
Lansdale Tube Co.
Lectronic Research
Newark Electric Co.
Pac. Semiconducters, Inc.
Philco Corp.
Radio Dev. & Res.
Radio Receptor
Raytheon Mfg. Co.
Scientific Specialties
Sylvania Elect. Prods.
Transitron Electronic
Tung-Sol Electric
Westinghouse Electric

DIODES, Silicon

Amperex Electronic
Bogue Electric Mfg.
Bomac Labs.
CBS-Hytron Div.
Centralab Div.
Fansteel Metallurgical
GE, Electronics Div.
Hughes Prods. Div.
Hydro-Aire
Industro Transistor Corp
Intelex Systems
International Rectifier
Kemtron Electron Prods.
Lectronic Research
Natl. Aircraft Corp.
Newark Electric Co.
Pac. Semiconductors
Philco Corp.
Radio Dev. & Res.
Radio Receptor
Raytheon Mfg. Co.
Sarkes Tarzian, Inc.
Shockley Transistor
Sylvania Elect. Prods.
Texas Insts. Inc.
Thermosen, Inc.
Transitron Electronic
Tung-Sol Electric
Westinghouse Electric

DIRECTION INDICATORS, Radio-actuated (see also Aircraft Instruments, also Navigation Aids)

Aircraft Radio Corp.
Avion Div.
Bendix Aviation Corp.
Bendix, Eclipse-Pioneer
Engrg. & Res. Corp
Kearfott Co.
Lear, Inc.
Radio City Products

DISPLACEMENT INDICATORS and/or RECORDERS, Linear Motion

Aero Electronics
Airborne Instruments
Airflo Instr. Co.
Alden Products
Alfax Paper & Engrg.
Allis-Chalmers
Amer. Electronic Mfg.
Annis Co.
Arma Corp.
Arnoux Corp.
Assembly Products
Askania Reg.
Askania-Werke, A. G.
Austin Co.
Autocall Co.
Automatic Electric
Autom. Timing & Controls
Avion Div.
Bailey Meter Co.
Barber-Colman
Bendix Aviation Corp.
Berkely Div.
Boston Auto Gage Co.
Bourns Labs.
Bristol Co.
Brown & Sharpe
Brush Instruments
Builders-Providence
Cal-Ohm Labs.
Cleveland Instrument
Colvin Labs., Inc.
Collins, Corp., G. L.
Computer Instr. Corp.
Consolidated Avionics
Consol. Electrodynamics
Crescent Engrg. & Res.
Daystronic Corp.
Decker Corp.
Dickson Co.
Donner Scientific
Dynapar Corp.
Edcliff Instruments
Electric Indicator Corp.
Electric Speed Ind. Co.
Elect. Tachom. Corp.
Electro Products Labs.
Electronic Assoc.
Endevco Corp.
Engis Equip. Co.
Epsco, Inc.
Esterline-Angus
Fairbanks, Morse
Ferranti Electric
Fielden Instr. Div.
Foxboro Co.
GE, Apparatus Sales
General Radio Co.
Genisco, Inc.
Geotechnical Corp.
Giannini & Co.
Gilmore Industries
Gorrell & Gorrell
Graydon Smith Prods.
Gurley, W. & L. E.
Gyroscopics, Inc.
Hagan Chem. & Controls
Hays Corp.
Henschel Corp.
Hesse-Eastern
Hickok Electcl. Instr.
Humphrey, Inc.
Industrial Electronics
Indikon Co.
Insco Company
Instruments Corp.
Internat. Res. & Dev. Corp.
Kearfott Co., Inc.
Kin Tel
Kistler Instr. Corp.
Knopf Instr. Co.
Larson Instr. Co.
Lear, Inc.
Leeds & Northrup
Leupold & Stevens
MB Mfg. Co
Manning, Maxwell & Moore
Mason-Neilan
Massa Div. of Cohu
Micro Gee Prods., Inc.
Minatron Corp.
Minn-Honeywell, Boston Div.
Neutronics Research
Non-Linear Systems
Norden-Ketay
Northam Electronics
Optron Corp.
Orban Co., Kurt
Pacific Scientific
Performance Measmts.
Phoenix Prec. Inst
Photocon Research
Potter Instr. Co.
RCA Div.
Republic Flow Meters
Research, Inc.
Robertshaw-Fulton
Roller-Smith
Sanborn Co.
Sanders Associates
Schaevitz Engineering
Seismograph Service
Servomechanisms, Inc.
Servo Tek Products
Shallcross Mfg.
Sheffield Corp.
Sperry Gyroscope
Sprengnether Instr.
Swartwout Co.
Tejax Engrg. Co.
Teller Co.
Topp Industries
Triplett Electcl. Instr.
United Control
Vectron, Inc.
Vibr. Measmt. Engrs.
Virginia Electronics
Wang Labs., Inc.
Weston Instrs.
Wiancko Engrg. Co.

DISPLACEMENT INDICATORS and/or RECORDERS Angular and Nonlinear and Motion

Aero Electronics
Alden Elect. & Impulse
Askania-Werke, A. G.
Bristol Co.
Brush Instruments
Cal-Ohm Labs.
Colvin Labs.,
Collins, Corp., G. L.
Consolidated Avionics
Consol. Electrodynamics
Crescent Engr. & Res. Co.
Davidson Mfg.
Decker Corp.
Dynapar Corp.
Elect. Tachometer Corp.
Electro Products
Engis Equip. Co.
Ferranti Electric
Fielden Instr. Div.
GE, Apparatus Sales
General Radio Co.
Giannini & Co.
Henschel Corp.
Humphrey, Inc.
Industrial Electronics
Kistler Instr. Corp.
Lear, Inc.
Leeds & Northrup
Manning, Maxwell & Moore
Micro Gee Prods., Inc.
Neutronics Research
Non-Linear Systems
Orban Co., Kurt
Optron Corp.
Phoenix Prec. Inst.
Potter Instr. Co.
Schaevitz Engrg.
Servo-Tek Prods.
Teller Co.
Trerice Co., H. O.
Waldorf Instr. Co
Wang Labs., Inc.

DISPLACEMENT PICK-UPS, Capacitance Type

Consol. Electrodynamics
Decker Corp.
Fielden Inst. Div.

Gulton Industries
Kistler Instr.
Lear, Inc.
Medical Electronics Dev
Micro Gee Prods.
Minatron Corp
Optron Corp.
Sheffield Corp.
Statham Laboratories
Ultradyne Engrg Labs
Wiancko Engrg. Co.

DISPLACEMENT PICK-UPS, Differential Transformer Type

Askania Reg.
Autom. Timing & Controls
Bristol Co.
Cleveland Instrument
Collins, Corp., G. L.
Control Components Co
Crescent Engrg. & Res.
Daystrom-Pacific
Daytronic Corp
Fielden Instr. Div.
Gulton Industries
Gyroscopics, Inc
Hagan Chem. & Controls
Hays Corp
Humphrey, Inc.
Industrial Electronics
Interntl. Resistance
Magnetic Instr. Co.
Minatron Corp.
Norwood Controls
Optron Corp.
Sanborn Co
Schaevitz Engrg
Sheffield Corp.
Swartwout Co.
Tensitron, Inc.

DISPLACEMENT PICK-UPS, Magnetic, Including Variable Reluctance

Altec Lansing
American Gryo Corp.
Control Components Co.
Consol. Electrodynamics
Crescent Engrg. & Res. Co.
Daystrom-Pacific
Dynapar Corp.
Electro Products Labs.
Electro-Voice
GE, Specialty Elect. Comp.
Geotechnical Corp.
Gulton Industries
Gyroscopics, Inc
Internat. Res. & Devel.
Lab-Tronics
Land-Air, Inc.
MB Mfg. Co.
Magnovox Co.
Miller Instruments
Minatron Corp.
Northam Electronics
Optron Corp.
Potter Aeronaut. Corp.
Potter Instr. Co.
Schaevitz Engrg.
Tensitron, Inc.
WacLine, Inc.
Wiancko Engrg Co.

DISPLACEMENT PICK-UPS, Resistive

Askania-Werke A. G.
Amer. Gryo Corp.
Bourns Labs.
Bristol Co.
Cal-Ohm Labs.
Colvin Labs.
Consolidated Avionics
Consol. Electrodynamics
Daystrom-Pacific
Dynamic Instrument
Edcliff Instruments
Electro-Mec Lab.
Electro Mechanical Div.
Electronic Engrg. Assocs.
Galetronics, Inc.
General Scientific
Giannini, G. M.
Humphrey, Inc.
Lab-Tronics
Markite Co.
Optron Corp.
Pacific Scientific
Polyphase Instr.
Schaevite Engrg.
Servonics Instruments
Statham Instrs.
Task Corp.

DISSOLVED-OXYGEN RECORDERS, see Gas Analyzers

DISTILLATION APPARATUS (see also Laboratory Apparatus)

Ace Glass
Aetna Scientific Co.
Amer. Instr. Co.
Amersil Co.
Apex Scient.
Artisan Metal Prods.
Baird-Atomic
Burrell Corp.
Cannon Instr.
Consol. Electrodynamics
Con. Electrolyn., Roch.
Corning Glass Works
Distillation Products
Electric Hotpack
Fisher Scientific
Friedrich & Dimmock
Glass Engrg. Labs.
Grain Lab. Equipt. Co.
Greiner, Emil
Greiner Glassblowing Lab.
Hallikainen Instruments
Harshaw Scientific Div.
Kimble Glass Co.
Koehler Instr. Co.
Kontes Glass

Labline, Inc.
Macalaster Bicknell
Nurnberg Thermometer
Owens-Illinois
Penfield Mfg.
Phila. Scientific Glass
Phoenix Prec. Inst
Prec. Glass Prods.
Precision Scientific
Process & Instruments
R. K. L. Valve & Mfg
Research Appl. Co.
Rudolph & Sons
Scientific Glass App
Smith Co., Arthur F.
Sorvall Inc
Technical Equipt. Co
Todd Scientific
Uhrig Co.,
Wakefield Industries

DISTORTION METERS

Ad-Yu Electronics Lab.
Audio Instr. Co.
Boonton Electronics
Brush Electronics
Daven Co.
Dyna-Empire, Inc
Empire Devices
Federal Telephone & Radio
Freed Transf. Co.
General Electronic
General Radio Co.
Hewlett-Packard
Hickok Elec. Instr.
Indust. Test. Equipt. Co
Kay Electric
Marconi Instruments
RCA Div.
Scott, Inc., Hermon
Sierra Electronic Corp.

DIVIDERS Voltage, Decade, see Resistance Boxes

DIVIDING HEADS, Optical

Amer. Meas. Insts.
Davidson Mfg
Engis Equipt. Co.
Ercona Corp.
Fecker, Inc., J. W.
Ferner Co.
Gaertner Scientific
Griswold Mfg. Co
Gurley, W. & L. E.
Helio Instr. Co.
Hillyer Instr. Co.
Jarrell-Ash
Kollmorgen Optical
Opto-Metric Tools
Scherr Optical Tools
Vinco Corp.
Webber Gage Co.
Zeiss, Inc., Carl

DIVIDING MACHINES, see Machines, Dividing

DOSIMETERS, see Radioactivity

DRAFT INSTRUMENTS (see also Boiler Room Instruments, also Pressure)

A-P Controls Corp.
Askania Reg. Co.
Atlas Valve Co.
Barcharach Indust. Instr.
B-I-F Industries
Bailey Meter Co.
Barber-Colman
Beck Co.
Berger Scient. Sups.
Bristol Co.
Cash Co., A. W.
Cassell Co., John R.
Cleveland Controls
Defender Instr. & Reg.
Denver Fire Clay Co.
Dietz Co., Henry G.
Dwyer Mfg., F. W.
Ellison Draft Gage
Foster Engrg. Co.
Foxboro Co.
General Controls
General Regulator Corp.
Gleason-Avery
Hagan Chem. & Controls
Hammel-Dahl
Hays Corp.
Leeds & Northrup
Mason-Neilan Div.
Meriam Instr. Co.
Minneapolis-Honeywell
Moore Products Co.
National Airoil Burner
Natural Gas Equipt. Co.
Perfex Controls Div.
Pitometer Log Corp.
Preferred Utilities Mfg.
Reliance Instr. Mfg.
Republic Flow Meters
Schade Valve Mfg.
Seely Instr. Co.
Shallcross Controls
Soreng Products
Taylor Instr. Cos.
Uehling Instr. Co
Weston Instrs.

DRAWING INSTRUMENTS

Airborne Instruments
Alina Corp.
Alpha Instr. Co.
Alteneder & Sons, Theo
ALWAC Corp.
Amer. Hydromath Corp.
Bachmann Co., Eric R.
Berger & Sons
Berger Scient. Supps.
Brown & Sharpe
Bruning Co., Inc.

Brush Instruments
Cassell Co., John R.
Dietzgen Co.
Drafto Co.
Gerber Scientific
Graf-Apsco
Gurley, W. & L. E.
Ithaca Scient. Instr.
Joyro Assocs.
Keuffel & Esser
Lindly & Co.
Los Angeles Scient
Micro Master Co.
Miller & Assoc., David
Millers Falls Co.
Omicron Co.
Opplem Co.,
Porta-Trace
Post Co., Frederick
Precise Measmts. Co
Rapidesign Inc.
Reed Research
Speidel & Co
Starrett Co.
Stratex Instr. Co
Suverkop Instruments
United States Blue Print
Univ. Drafting Mach
V. & E. Mfg.
Warren-Knight
Weber Co., F.
White Co
Wild-Heerbrugg
Williams, Brown & Earle

DRIFT INDICATORS

Bendix, Eclipse-Pioneer
Carroll Co., J. B.
Consolidated Avionics
Curtiss Labs. Inc.
Driftmeters, Inc
Eastman Oil Well
Fecker, Inc.
Gurley, W. & L. E.
Instr. Associates
Kalbfell Labs.
Kollmorgen Optical
Kollsman Instr. Div.
Koll Instr. Div.
Krohn-Hite
Norden-Ketay
Pioneer Instr. Co
RCA Div.
Scott, Inc., Hermon
Servo Corp. of Amer.
Thwing-Albert

DRIFT INDICATORS, Bore Hole (see also Inclinometers)

Edcliff Instruments
Georator Corp.
Sperry-Sun Well Survey

DRILLS, Precision

Bayside Watch Tool Co
Black & Decker Mfg.
Chicago Wheel & Mfg.
Circular Tool Co.
Crafts & Co.
Cramer Controls Corp
Derbyshire, Inc.
Dixon, Inc.,
DoAll Co.
Electro-Mechano Co.
Engel, Inc.,
Ferner Co.
Fineisen, A. R.
Fish-Schurman
Gallien, R. P.
Gorton Mach Co.
Grobet File
Hamilton Tool Co.
Hamilton Watch
Hartford Spec. Mach. Co
Ingersoll-Rand
Jadow Inc., B.
Jensen Tool Co.
Leiman Bros. Inc.
Levin & Son
Link Engrg. Co.
Millers Falls Co.
Morris Co., J. I.
Phillips & Hiss Co.
Pratt & Whitney
Robertson & Ruth
Sphinx American Co.
Swiss Amer. Jewel-Bear.
Taylor Dynamom. & Mach.
Taylor Mfg. Co.
Tech. Oil Tool Corp.
Willey's Carbide Tool

DRIP WELLS, see Air Cleaners

DRIVES, Instrument, see Clockworks, also Gear Trains

DRIVES, Variable Speed

AiResearch Mfg. Co.
Allis-Chalmers
Amer. Electronics, Inc.
Breeze Corp., Inc.
CGS Labs., Inc.
Cedar Engrg., Inc.
Cleveland Worm & Gear
Corbett Science Labs.
Dynamatic Div.
GE, Apparatus Sales
General Radio Co.
Graham Transmissions
Green Rectifier
Insco Company
Instr. Component, Inc.
Jan Hardware Mfg. Co
Machinery Electrification
Magnetic Instr. Co.
Master Electric
R. S. Electronics
Raytheon Mfg.
Reeves Pulley Div.
Reliance Elect. & Engrg.
Revco, Inc.
Servospeed Div.
Servo-Tek Products
Suffolk Products

U.S. Electrical Motors
Vickers, Inc.
WacLine, Inc.
Western Gear Corp.
Westinghouse Electric
Worthington Corp.

DRYERS, Air or Gas

Anders Lykens
Applied Dynamics
Beckman Instrs.
Bellows Co.
Bendix, Pioneer-Central
Briggs Filtration Co.
Daco Instrument
Dehydrators, Inc.
Dormitzer Elec. & Mfg.
Driaire, Inc.
Electric Hotpack
Hankison Corp.
Kahn & Co.
Kemp Mfg. Co.
King Engrg.
Lear Inc.
Lennard Co.
Logan Engrg. Co.
Murphy & Miller
New Jersey Meter Co.
Passaic Analytical Labs.
Pittsburgh Lectrodryer
Pritchard & Co.
Robbins Aviation
Selas Corp.
Specialties Inc.
Swanson Engrg. Co.
Temp. Engrg. Corp.
Trinity Equipt. Corp.
Universal Dynamics
Van Products Co.

DUPLICATORS FOR MAKING and MACHINING MOLDS and DIES

Gorton Mach. Co.
Hirschmann Co.
Instr. Tool & Engrg.
Orban Co., Kurt
Pratt & Whitney
Preis Engraving Mach. Co

DUROMETERS, see Hardness Testing Machines

DUST ANALYSIS APPARATUS, see Air Pollution, also Air Particle

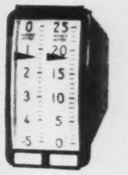
DYNAMOMETERS, see Torque

DYNAMOTORS, including Transistorized

Alliance Mfg. Co.
Bendix, Eclipse-Pioneer
Carter Motor Co.
Dalmotor Co.
Diehl Mfg.
Elcor, Inc.
Electric Spec. Co.
Electro Engrg. Prods. Co
Ferner Co.
Fidelity Elec. Co.
GE, Apparatus Sales
Globe Industries, Inc.
Holtzer-Cabot
Induction Motors Corp.
Interelectronics Corp.
Janette Mfg.
Motordyne, Inc.
Nader Mfg. Co
Redmond Co., Inc.
Sangamo Electric
Siemon Engrg. Co.
Small Motors Inc.
Task Corp.
Tele Dynamics Inc.
Universal Transistor
Western Gear Corp.

EARTH CURRENT INDICATORS

Associated Research, Inc.
Biddle Co., James G.
Borden Engrg. Div.
Bristol Co.
Federal Telephone & Radio
Georator Corp.
Geotechnical Corp.
Helland Div.
Instrument Labs.
Marconi Instruments
Miller, M. C.
Physics Res. Labs.
Rawson Electcl. Instr.
Shallcross Mfg.
Triumph Mfg.
United Optical
Westinghoue Electric



BAILEY
MULTI-POINTER
GAGE UNIT

• Provides two large, easily-read 7-inch vertical gages in space only 4 inches wide. Multi-Pointer Gage Units may: (1) measure and indicate draft, pressure, differential pressure, and level; (2) transmit these variables either pneumatically or electrically to remote indicators, recorders, and/or controllers; or (3) receive and indicate any measured variables which may be transmitted pneumatically by standard SAMA ranges of 3-15 psig or 3-27 psig.

Any number of basic two-indicator units may be placed side-by-side to provide indications of related factors. Each two-indicator unit is separately mounted.

Standard ranges from 0-0.5 in. H_2O to 0-5000 psig are available.

Request Product Specifications M42-2.

BAILEY METER COMPANY
1041 IVANHOE ROAD CLEVELAND, O.
Bailey Meter Company Ltd., Montreal, Canada

For more information circle 103 on inquiry card.

Stainless Precision Tools

Steel T-Squares
Steel Triangles
Steel Straightedges
Drawing Instruments
Drafting Scales

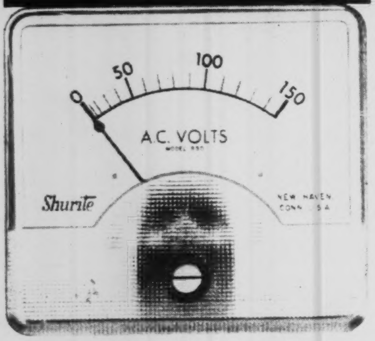
Circular & Linear
Engraving to order

Catalog on request

Theo. Alteneder & Sons
Since 1850
1221 SPRING GARDEN STREET
PHILADELPHIA 23, PA.

For more information circle 104 on inquiry card.

Shurite
INDICATING METERS



850 Series shown ⅞ actual size

Newest in the broad line of Shurite electrical panel meters are the **clear-plastic** Model 850 types. They dress up panels and equipment, offer exceptional visibility, and continue the sturdy interior construction which marks Shurite as an exceptional value. Features include:

RECTANGULAR CASE FRONTS—2-17/32″ wide by 2-5/16″ high, of crystal polystyrene to admit light from all sides.

Case design gives the appearance of a substantially larger scale. Special calibration and one to five color dials are available on quantity orders.

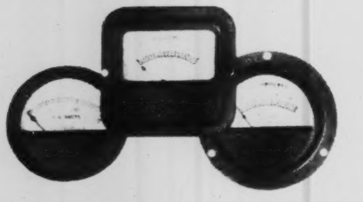
ZERO ADJUSTER—All 850 series, AC or DC, can have this feature at a nominal adder.

MOUNTING—Meter barrel fits standard 2-5/32″ hole of Shurite metal-cased 550 or 950 series, and any smaller hole down to 2-1/64″. Only one hole needed in panel, meter held with U-bracket.

PERFORMANCE—Accuracy is well within the standard 5%. AC meters are double-vane repulsion type; DC are polarized-vane solenoid or moving magnet construction. AC uses a jewelled bearing for continuing accuracy and a long useful life.

Please request Bulletin 63-A for further information on the widely-used metal-cased meters shown below.

METAL-CASED TYPES



Illustrated above are the 550 rimless round, the 950 rectangular, and the 650 flange-mounted round types. There is a choice of 234 ranges and models listed in Bulletin 63-A. All require 2-5/32″ mounting hole. Zero adjusters are available in the DC ranges of 550 and 650 meters.

SHURITE METERS
New Haven 8, Conn.

For more information circle **105** on inquiry card.

EARTH RESISTANCE INDICATORS

Biddle Co., James G
Borden Engrg. Div
Cal-Ohm Labs
Electro-Tech Equip
Houston Technical Labs
Rawson Electcl. Instr
Sensitive Res. Instr
Sticht Co., Herman H
Tell Tronics Prods
Texas Instrs., Ind. Div

EBULLIOMETERS

Amer. Instr. Co
Bellco Glass Inc.
Central Scientific
Distillation Products
Ferguson Co.
Fisher Scientific
Greiner Glassblowing Lab
Kontes Glass
Phoenix Prec. Inst
Podbielniak, Inc.
Precision Scientific
Prec. Thermom. & Insts
Rascher & Betzold
Refinery Supply Co.
Weston Instrs.

EBULLISCOPES, see Ebulliometers

ECHELON GRATING, see Grating, Echelon

EDUCATION COURSES, Instrument, see Correspondence Schools

ELECTRIC POWER GENERATION INSTRUMENTS, including Power Analyzers, Frequency and Phase Instruments, Substation Instruments (see also Load, also Network Analyzers)

Aero Instr. Co
AiResearch Mfg.
Allis-Chalmers
Amer. Electronics
Amer. Mach. & Foundry
Amer. Meter Co.
Atlas Valve Co.
Automatic Electric
Autom. Switch
Bristol Co.
Burlington Instr. Co
Cal-Tronics Corp.
Cardwell Mfg.
Cincinnati Clock
Consolidated Avionics
Control Corp.
Control Engrg. Co
Counter & Control Corp.
Cutler-Hammer
Davenport Mfg.
Desco Mfg. Co.
Dynapar Corp.
Eastern Specialty
Edin Electronics
Electro-Products Labs
Electro-Tech. Equipt.
Electrosig Corp.
Ellison Draft Gage
Esterline-Angus
Fisher Governor
General Controls
GE, Apparatus Sales
General Instr. Co
Goodyear Aircraft
Heiland Div.
I. T. E. Circuit Breaker
Instrument Labs.
Kearfott Co.
Knopp, Inc.
Lear, Inc.
Leeds & Northrup
Magnetic Industries
Manning, Maxwell & Moore
Minneapolis-Honeywell
Nelson Electric Mfg.
Niagara Elect. Instr.
Oregon Electronic Co.
Panoramic Radio Prods.
Physics Research Labs.
Polytechnic Res. & Devel.
Pneumafil Corp.
Proportioneers, Inc.
Sensitive Res. Instr.
Servospeed Div.
Shallcross Controls
Simpson Electric
Sticht Co., Herman H.
Thordarson-Meissner
Trerice Co., H. O.
Triplett Elect. Instr.
Voltron Products
WacLine, Inc.
Westinghouse Electric
Weston Instrs.

ELECTRICAL INDICATORS (see also D'Arsonval Movements, also Voltmeters, Ammeters, etc.)

Advance Electronics
Advanced Electronics, Inc.
Aero Elx. (Chicago)
Allina Corp.
Allard Instr. Corp.
Amer. Elect. Sales Co.
Assembly Products
B & H Instr. Co.
B/W Controller
Baird-Atomic
Ballantine Labs.
Bristol Co.
Brush Instruments
Chicago Indust. Instr. Co.
Clippard Instr. Lab.
Clough-Brengle
Columbus Products
Computer Co. of Amer.
Dale Instruments Div.
Daven Co.
DeJur-Amsco
Dittmore & Freimuth
Donner Scientific
Electric Des. & Mfg.
Electro-Mech. Instr.
Electronic Devel. Lab.
Electronic Instr. Co.
Electronic Measmts. Co.
Electro Products Lab.
Electro-Tech Equipt. Co.
Feiler Engrg. Co.
GE, Apparatus Sales
General Electronic
General Radio
Geotechnical Corp.
Haydon Co., A. W.
Hewlett-Packard
Hickok Electcl. Instr.
Internat. Instruments Inc.
Jackson Electcl. Instr.
Keithley Instrs., Inc.
Kirkland Co.
Manning, Maxwell & Moore
Marion Elect. Instr.
Mastercraft Inst. Co.
M. B. Mfg. Co.
Meters, Inc.
Midwestern Instruments
Minneapolis-Honeywell
  Rubicon Instrs.
North Atlantic Industs.
Pace Electcl. Instr.
Philco Corp.
Physics Res. Labs.
Precision App. Co.
Prec. Meter Co.
Radio City Products.
R C A Div.
Rawson Elect. Instr. Co.
Reiner Electronics
Sensitive Res. Instr.
Shallcross Mfg.
Shurite Meters
Simpson Electric
Supreme, Inc.
Thordarson-Meissner
Triplett Electcl. Instr.
Triumph Mfg. Co.
United Optical
WacLine, Inc.
Waters Mfg.
Western Electro-Mech.
Westinghouse Electric
Weston Instrs.

ELECTRICAL INSTRUMENT CALIBRATORS and TEST SETS for Voltage, Current, etc.

Aero Electronics
Aircraft Radio
Amer. Electroneering
Antenna Research Lab.
Assembly Products
Assoc. Research, Inc.
Authorized Mfrg. Service
Automatic Electric
Avion Div.
B & H Instr. Co.
B & K Mfg. Co
Baldwin-Lima-Hamilton
Ballantine Labs.
Beck Bros.
Beckman Div.
Biddle Co., James G
Bogue Electric
Boonton Radio
Booth Co.
Bourns Labs.
Bristol Co.
Bristol Engrg. Corp.
Browning Labs.
Burroughs Electronics
Callidyne Co.
Cal-Ohm Labs.
Cal-Tronics Corp.
Cambridge Instr. Co.
Chicago Indust. Instr.
Clippard Instr. Lab.
Clough-Brengle
Computer Co. of Amer.
Consolidated Avionics
Cox Instruments
Daven Co.
Davenport Mfg. Co
Daystrom Instr.
Desco Mfg. Co.
Dit-Mco, Inc.
Donner Scientific
Douglass Radio Labs
Duncan Elect. Mfg.
Dyna Labs.
Eastern Specs. Co.
Electro Insts., Inc.
Electro Measurements, Inc
Electro-Mec Lab.
Electron-Radar Prods.
Electronic Assocs.
Electronic Devel. Lab.
Electro-Tech. Equipt
Engelhard, Inc., Chas
Engrg. Enterprises
Epic, Inc.
Esterline-Angus
Federal Telephone & Radio
Feiler Engrg. Co.
Ferranti Electric
Ferris Instr. Co.
Fox Valley Instr. Co.
Gadget Inc.
Gates Electronic Co.
GE, Apparatus Sales
General Electronic
Genl. Hermetic Sealing
Genisco, Inc.
Geotechnical Corp.
Gilmore Industries
Gray Instr. Co.
Hallikainen Instruments
Hamner Electronics
Hathaway Instr. Co.
Heiland Div.
Hewlett-Packard
Hickok Elect. Instr.
Hormell Instr. Co.
Hoover Electronics
Hycon Electronics
Hydro-Aire, Inc.
Ideal Industries, Inc.
Industrial Electronics
Industrial Engrg. Corp.
Industrial Test Equipt.
Instrument Laboratories
Jackson Electcl. Instr.
Kahn & Co.
Kay Electric
Kin Tel
Knopp, Inc
Lavoie Labs
Leeds & Northrup
Lewis Engrg. Co
Lyman Electronic
M. B. Mfg. Co.
MacLeod & Hanopol
Manson Labs.
Marion Elect. Instr.
Martindale Electric
Measurements Corp.
Meyer-Opticraft
Miller, M. C.
Millivac Instr. Co.
Minneapolis-Honeywell
  Rubicon Instrs.
Multi-Amp Corp.
Nankervis Co., G. L.
Natl. Inst. Labs.
Nelson Electric Mfg.
Nelson Instr. Co
New Jersey Electronics
Niagara Elect. Instr.
Non-Linear Systems
Northrop Anaheim
Norton Electcl. Instr.
Oltronix Co
Opplem Co.
Owen Labs.
Peschel Electronics
Phaostron Co
Physics Res. Labs.
Polyphase Instr. Co
Potter Co.
Potter Instr. Co.
Precise Devel. Corp.
Precise Measmts. Co
Precision App. Co.
Prec. Meter Co.
Premier Res. Labs.
Pyramid Instr. Co.
Radio City Prods.
R C A Div.
Radio Frequency Labs.
Radionics, Inc.
Ram Meter, Inc.
Rawson Elect. Instr.
Raytheon Mfg.
Reiner Electronics
Riverbank Labs.
Rockwell Engrg. Co.
Roller-Smith
Rowe Engrg. Co.
Rutherford Electronics
Sangamo Electric
Schauer Mfg.
Scientific Specialties
Scott, Inc., Hermon Hosmer
Sensitive Res. Instr.
Shallcross Mfg.
Shasta Div.
Shepard Labs.
Sherron Metallic Corp.
Simpson Electric
Sittler Corp.
Sorensen & Co.
Sperry Gyroscope
Standard Electric Time
Standard Products, Inc.
States Co
Sticht Co., Herman H
Stratex Instr. Co
Sun Electric
Sylvania Elect. Prods.
Tech Labs., Inc
Tektronix, Inc.
Teletronics Lab.
Televiso Corp.
Tenney Engrg. Co
Thwing-Albert
Transformers, Inc
Transistor Devices
Transval Engrg. Corp.
Thordarson-Meissner
Trenton Transf. Corp.
Triplett Electcl. Instr.
United Mfg. Co.
United Optical
Virginia Electronics
WacLine, Inc.
Walkirt Co.
Waters Mfg.
Weston Instrs.
Westport Electric
Winslow Co.

ELECTRIC WAVE FILTER SECTIONS, see Filters, Frequency

ELECTROANALYSIS APPARATUS (see also Analytical Instruments)

Aero Electronics
Avion Div.
Beckman Div.
Beckman Instr.
Burrell Tech. Sup.
Bush Assocs.
Central Scientific
Coleman Electric
Consol. Electrodynamics
Eberbach Corp.
Eberbach & Sons
Fisher Scientific
Griswold Mfg. Co
Hamner Electronics
Kahn & Co.
La Motte Chem. Prods.
Leeds & Northrup
Leitz, Inc.
Mid-Century Instrumatic
Minneapolis-Honeywell
  Boston Div.
  Rubicon Instrs.

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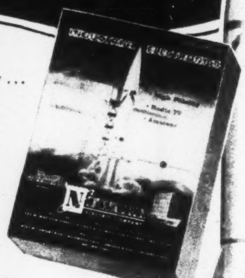

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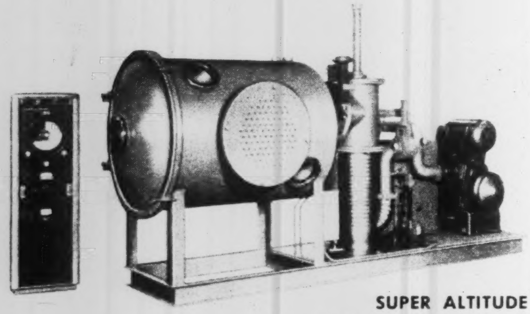

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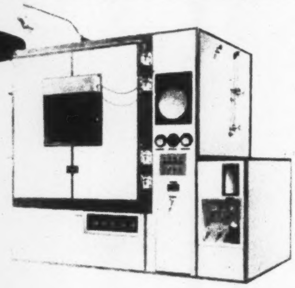

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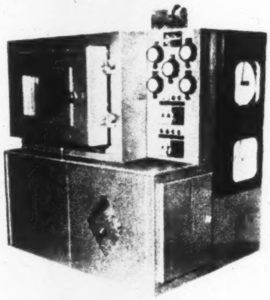

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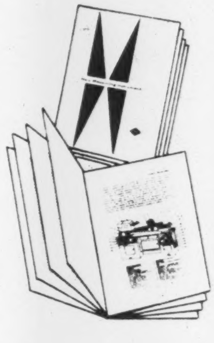

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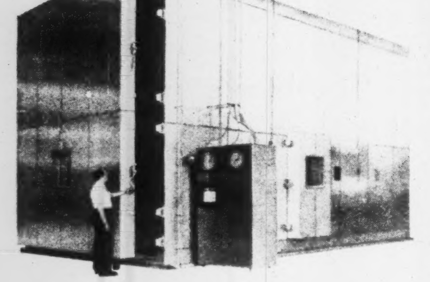

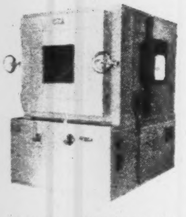

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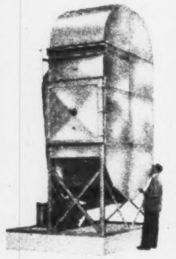

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Heese-Eastern
Hunter Spring
Krouse Testing Mach
L. A. B. Corp.
Lessels & Assocs.
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M. B. Mfg. Co.
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Precision Scientific
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Riehle Div.
Scott Testers, Inc
Taller & Cooper
Testing Machines, Inc
Thwing-Albert
U. S. Testing Co.
Warren Bros. Mfg. Co.
Westinghouse Electric

FAULT LOCATORS, Communication and Lines

Aero Electronics
Automatic Electric
Biddle Co., James G
Bogue Electric Mfg.
Borden Engrg. Div.
Brush Instruments
Cal-Ohm Labs.
Cook Electric
DuMont Labs., Allen B
Electro Measurements, Inc.
Epic, Inc.
Excel Elect. Service Co
Fisher Research Lab.
General Communication
GE
Georator Corp.
Geotechnical Corp
Gray Instr. Co.
Hewson Co
Industrial Insts., Inc
Instrument Labs
Joy Mfg.
Kahn & Co.
Leeds & Northrup
Marconi Instruments
Menlo Research
Metrol Inc.
Minneapolis-Honeywell
  Boston Div.
  Rubicon Instrs.
Nelson Instr. Co.
Parr Mfg. Corp.
Peschel Electronics
Pneumafil Corp.
Rawson Elect. Instr. Co
R-C Scientific Instr.
Shallcross Mfg
Sierra Electronic
Teletronics Lab.
Texas Insts., Inc.
Tobe Deutschmann Corp.
United Optical
Westinghouse Electric

FAULT LOCATORS, Electrical Resistance

Borden Engrg. Div.
Brush Instrs.
Cal-Ohm Labs
Clark Controller
Electro-Measurements
Engrg & Res. Corp.
Excel Elect. Service Co
General Communication
Hewson Co.
Industrial Insts., Inc
Leeds & Northrup
Metrol Inc.
Minneapolis-Honeywell
  Rubicon Instrs.
Nelson Instr. Co.
North Amer. Philips
Parr Mfg. Co
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Physics Res. Labs., Inc.
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FEED WATER TESTING APPARATUS, see Water Analysis Outfits

FEED WATER METERS, see Flowmeters, also Boiler Room Instruments

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FIELD RHEOSTATS, see Rheostats, Field

FIELD-STRENGTH MEASURING SETS, Electromagnetic Field (see also Magnetic Field)

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Hammer Electronics
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Marion Instr. Co.
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Radio City Products
RCA Div
Sensitive Res. Instr
Sherron Metallic Corp
Simpson Electric
Std. Electronic Res.
Stoddart Aircraft Radio
Tobe Deutschmann Corp

FILLING MACHINES, see Machines, Filling

FILLING MEDIA for Thermometers

Greiner, Emil
Scientific Instr. Co

FILTER PAPER, see Laboratory Apparatus

FILTERS, Air, see Air Cleaners

FILTERS, Band Elimination and/or Band Pass

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Audio Devel. Co
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Bausch & Lomb
Bellmore Gear
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BJ Electronics
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Budd-Stanley Co., Inc
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Caledonia Elects. & Trans
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Calmag Div.
Cal-Ohm Labs
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Capcon Corp.
Carad Corp.
Centralab Div
Chicago Electronic Engrg
Chicago Std. Transf. Corp
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Clegg Labs., Inc
Coast Coil Co
Collins Radio
Communication Access. Co
Control Electronics
Cornell-Dubilier
D & R, Ltd.
Daven Co.
Davies Labs. Div.
Dearborn Electronic Labs
Defiance Engrg. & Micro
Diamond Antenna & Micro
Dielectric Prod. Engrg
Dietz Design & Mfg.
Donner Scientific
DuMont Labs., Allen B
ESC Corp.
Electro Instrs., Inc
Electro-Mechanical Res
Electronic Specialty Co
Electronic Transf. Co
Electro-Tech. Labs.
Empire State Labs.
Engrg. & Res. Corp
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Esco Products
Fed. Telephone & Radio
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Flow Corp.
Freed Transf. Co
General Communication
General Radio
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Gudeman Co.
Gulton Industries
Hansen Electronics
Hewlett-Packard
Hopkins Engrg. Co.
Hycon Eastern
Hycor Div.
Johnson Co., E. F.
Kaiser Aircraft & Elect.
Kearfott Co.
Kauket & Co.
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Krohn-Hite
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Lynn, Robert M.
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Narda Microwave
Natl. Aircraft Corp
North Hills Electric
Opad Electric Co
Orbitran Co
Orthro Filter Corp
P & H Electronics
Pacific Instr. Co.
Phoenix Precision Inst
Polaroid Corp.
Polyphase Instr.
Potter Co.
Probescope Co
Pulse Engrg., Inc
Radio Corp. of Amer
Radio Frequency Labs
Radionics, Inc.
Railway Communications
Riverbank Labs.
San Fernando Elec. Mfg
Sangamo Electric
Sierra Electr. Corp
Southwestern Ind. Elec
Spectrum Instrs. Inc
Spencer-Kennedy Labs
Std. Electronic Res.
Stromberg-Carlson
Superex Electronics
Tarc Electronics
Tech. Material Corp
Technical Prods. Co
Technicraft Labs., Inc
Telonic Industries
Texas Div., Clevite
Thermador Electcl. Mfg
Tobe Deutschmann
Torwico Electronics
Transformer Engrs.
Transformers, Inc.
Transval Engrg.
Triad Transformer Corp
United States Electronics
United Transf. Corp.
Varo Mfg. Co., Inc.
Western Electro-Acoustic
  Lab. Inc.
Wheeler Electronic Corp
White Instr. Labs

FILTERS, Crystal

Astron Corp.
Billey Electric
Burnell & Co.
Clegg Labs., Inc.
Communication Access.
Daven Co.
Defiance Engrg
Dietz Design & Mfg
Downing Crystal Co
Diamond Antenna & Micro
Eastern Prec. Resistor
Hallicrafters Co
Hycon Eastern
Knights Co., James
Marsco Mfg. Co.
Orthro Filter Corp
Probescope Co. & Micro
Technical Prods. Co
Texas Insts., Inc
Unertl Optical
United Trasf. Corp
Valpey Crystals
Vectron, Inc.

FILTERS, Electrical Wave, see Filters, Frequency

FILTERS, Frequency see also Noise Filters

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Airborne Accessories Corp
Airborne Insts. Lab
AiResearch Mfg
Airtron, Inc
All-Tronics, Inc
Allen-Bradley Co
Allison Labs.
Amerac Inc.
Amer. Electroneering
Astron Corp.
Audio Devel. Co
Avion Div.
Axel Bros., Inc.
Bailey Electric
Baico Res. Labs
Bendix Aviation Corp
Berkshire Labs.
Brush Instruments
Budd-Stanley Co., Inc
Burnell & Co.
C. G. S. Labs.
Cal-Ohm Labs.
Cal-Tronics Corp
Calif. Magnetic Cont. Corp
Campbell Co., J. A.
Carad Corp.
Centralab
Chicago Condenser Co
Chicago Std. Transf. Corp.
Cinema Engrg. Co.
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Clevite Elect. Comp
Clippard Instr. Lab.
Clough-Brengle
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Communication Access. Co
Control Electronics
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Daven Co.
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Electronic Specialty Co
Electronic Transf. Co
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F-R Machine Works
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Federal Telephone & Radio
Femco, Inc
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Freed Transf. Co
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Kin Tel
Kearfott (Western
Kenyon Transf. Co
Keystone Products
Krohn-Hite
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Lenkurt Electric
Ling Electronics
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Microtran Co
Millen Mfg. Co.
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North Electric
Opad Electric Co
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Specialties, Inc.
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Std. Transf. Corp
Superex Electronics Corp
Tech. Material Corp
Telechrome, Inc.
Televiso Corp.
Telonic Industries
Texas Insts., Inc.
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Thordarson-Meissner
Tobe Deutschmann
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Transformer Engrs
Transval Engrg. Corp.
Triad Transf. Corp.
United Transf. Corp.
Varo Mfg. Co.
Vectron, Inc.
Western Electro-Acoustic
  Lab. Inc.
White Instr. Labs
Wilmar Mfg

FILTERS, Light and Optical

Aerovox Corp.
Alfa Amer. Corp
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Amer. Optical
Axler Associates
Baird-Atomic
Bausch & Lomb
Behm & Sons
Bell & Howell
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Boehmke Optical
Bray Optical
Bronoptics Co.
Buhl Optical
Bushnell Co., D. P.
Cast Optics Corp.
Central Scientific
Corning Glass Works
Crystal Research Labs.
Curtiss Labs. Inc.
Dearborn Scientific
Dome Precision Corp
DuMont Labs., Allen B
E & W Optical Co.
Eastman Kodak
Edmund Scientific
Edna Lite Co.
Electro-Physics
Empire State Labs.
Enteco Industries
Ercona Corp.
Esco Prods. Co.
Evap. Metal Films, Inc.
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Ferner Co.
Fish-Schurman
Gaertner Scientific
Gates & Co.
GE, X-Ray Corp
General Radio
General Scientific
Geophysical Instr. Div
Georator Corp.
Goerz Amer. Optical
Gordon Enterprises
Green Rectifier Co
Harrison & Harrison
Hayward Scient. Glass
Helio Instr. Co
Henson Co.
Herron Optical
Hoffman Engrg.
Internat. Optical
Jaegers, A.
Ian Hardware Mfg
Jarrell-Ash
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Lynn; Robert M
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Meyer-Opticraft
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  Rubicon Instrs
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Unertl Optical
Univis Lens Co.
Wollensak Optical
Zeiss, Inc., Carl
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FILTERS, Porous Metal

Accessory Prods. Corp.
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Askania Reg.
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Bishop & Co., J.
Chemiquip Co.
Consol. Electrodynamics
Fisher Co., Oscar
Gar Prec. Parts, Inc.
High Pressure Equipt. Co
Hoke, Inc.
International Powder
Kahn & Co.
Kaye & MacDonald
Keckley Co.
Lennard Co., P. M.
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Mine Safety Appls
Moraine Products Div.
Norgren Co., C. A.
Pressure Prods. Industries
Schrader's Son, A.
Trinity Eqpmt. Corp
Watts Regulator Co.

FILTERS, Radio Noise, see Filters, Frequency

FILTERS, WATER

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B-I-F Industries
Bendix, Pioneer-Central
Bogue Elect. Mfg.
Crystal Research Labs.
Daigger & Co.
Dollinger Corp.
Enley Products
Ertel Engrg. Corp
Fisher Scientific
Infilco
Marvel Engrg. Co.
Micro Metallic Corp
Penfield Mfg. Co.
Permutit Co.
Robbins Aviation
Sel-Rex Corp.
Selas Corp. of Amer

FILTERS, Wire Cloth

A-P Controls Corp.
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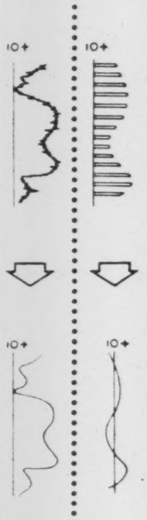

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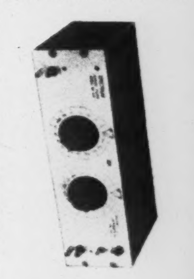

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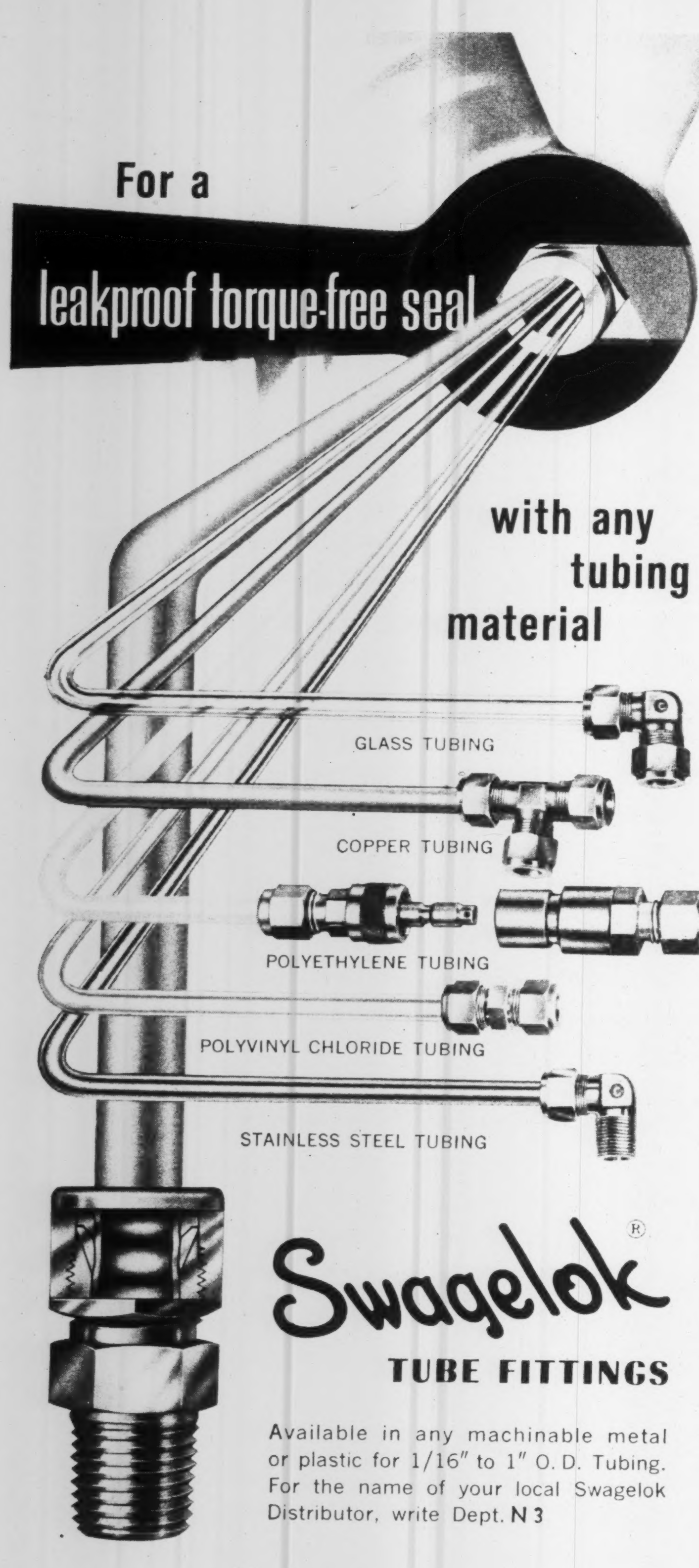

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Jordan Reg. Corp.
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Unistrut Prods. Co
Weatherhead Co.

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Conduflex Corp.
Crawford Fitting Co.
Deutsch Co.
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Dole Valve Co.
Flexonics Corp.
Flodar Corp
Grammes & Sons
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Hays Mfg. Co.
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Imperial Brass
Insuline Corp. of Amer
Jordan Corp
Jordan Reg. Corp.
Moore & Co., Samuel
Mueller Co.
Natl. Automatic Prod.
Parker-Hannifin Corp
Scovill Mfg. Co.
Seamlex Co.
Steel Co., Herman D
Swissomatic Products
Uehling Instr. Co
Unistrut Prods. Co.
Vallorbs Jewel Co.
Weatherhead Co.
Westinghouse Air Brake Co

FITTINGS, Jacketed

Ampco Mfg. Co.
Conduflux Corp.
Crawford Fitting Co.
Hetherington & Berner
Jerguson Gage & Valve
Littleford Bros.
Warren Bros. Mfg.

FITTINGS Hard Rubber, Plastic & Commercial Plastics

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Conduflex Corp.
Cooper Alloy Foundry
Crawford Fitting Co.
Flodar Corp
General Rubber
Goodrich Co., B. F.
Grinnel Co.
Imperial Brass Mfg
LaPine & Co.
Luzerne Rubber
Polymer Corp.
Raybestos-Manhattan
Regal Plastic Co.
Scheidl Mfg. Co.
Stokes Molded Prods.
Tube Turns Plastics
Uehling Instr. Co.
U. S. Rubber Co.
Vallorbs Jewel Co.
Vanton Pump & Equipt.

FITTINGS, High Pressure

Aeroquip Corp.
Amer. Instr. Co.
Autoclave Engrs.
Bastion Blessing
Buchanan Elec. Prods.
Conduflex Corp.
Crawford Fitting Co.
Flexonics Corp.
Flodar Corp.
Gar Precision Parts

High Pressure Equipt. Co
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Ingersoll-Rand
Mueller Co
Natl. Automatic Prod. Co.
Parker-Hannifin Corp
Pressure Prods. Industries
Research Appliance Co.
Ruska Instr. Corp.
Special Screw Prods. Co.
Tru-Seal Div.
Weatherhead Co.

FITTINGS, Quick-Disconnect

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Aeroquip Corp
Airtron, Inc.
Bel-Art Products
Clippard Instr. Lab.
Coaxial Connector Co.
Conduflex Corp.
Crawford Fitting Co
Eastern Industries
Hansen Mfg. Co.
Hydromatics Inc.
Jordan Corp.
Jordan Reg. Corp
Kahn & Co.
Potter Aeronaut. Corp
Schrader's Son, A.
Simmonds Aerocessories
Snap-Tite, Inc.
Tech. Material Corp
Vanton Pump & Equipt.
Weatherhead Co.

FITTINGS, Stainless Steel

Aeroquip Corp
Aero Supply Mfg
Autoclave Engrs.
Century Controls Corp.
Conant Bros. Co.
Conduflex Corp.
Crawford Fitting Co
Crucible Steel Co.
Deutsch Co
Dragon Engrg. Co.
Flexonics Corp
Flodar Corp
Gar Precision Parts
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High Pressure Equipt. Co.
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Jordan Corp
Jordan Reg. Corp.
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Pressure Prods. Industries
Quaid Fabrications
R-P & C Valve Div
Research Appliance Co
Robbins & Assocs.
Ruska Instr. Corp.
Snap-Tite, Inc.
Special Screw Prods. Co
Star Stainless Screw Co
Tru-Seal Div.
Uehling Instr. Co
Unistrut Prods. Co.
Vanton Pump & Equipt.
Weatherhead Co

FITTINGS, Steel Tube and Pipe

Aeroquip Corp.
Aero Supply Mfg. Co
Alden Products
Allegheny Ludlum
Autoclave Engineers
Buchanan Elec. Prods
Century Controls Corp.
Chiksan Corp
Clippard Instr. Lab
Conant Bros.
Conax Corp
Conduflex Corp.
Crawford Fitting Co.
Crucible Steel Co.
Deutsch Co
Flexonics Corp.
Flodar Corp.
Gar Prec. Parts
Henry Valve Co
Hetherington & Berner
High Pressure Equipt. Co.
Howell Auto. Mach.
Imperial Brass
Jordan Corp.
Littleford Bros.
Mueller Co.
Natl. Automatic Prods. Co.
Parker-Hannifin Corp
Quaid Fabrications
Robbins Aviation Co.
Scovill Mfg. Co.
Special Screw Products
Tru-Seal Div.
Uehling Instr. Co.
Unistrut Prods. Co.
Weatherhead Co.

FLAME FAILURE SAFEGUARDS, see Combustion Safeguards

FLANGES, Orifice, see Orifice Flanges

FLANGES, Pipe

Ace Glass Inc.
American Meter Co.
Commercial Plastics
Conant Bros. Co.
Grinnell, Co.
Henry Valve Co
Jordan Corp.
Vanton Pump & Equip

FLASH POINT TESTERS, including Cleveland Open Cup, Elliott Closed Cup, Pensky-Martens, and Tage Closed

Amer. Instr. Co.
Apex Scient.
Boekel & Co.
Central Scientific
DuBois Engrg. & Mfg
Eitzen Co., L. C.
Fisher Scientific
Greiner, Emil
Humboldt Mfg. Co
Koehler Instr. Co.
Labline, Inc.
Olsen Testing Machine
Precision Scientific
Ruttco Mfg. Co.
Soiltest, Inc.
Weston Electcl. Instr

FLASHERS

AEMCO, Inc.
Amglo Corp.
Chatham Electronics
Davis Insts. Div.
Dormitzer Elec. & Mfg
Electronic Spec. Co.
E-T-A Products
Fecker, Inc., J. W.
Fruengel, Inc.
Gordon Enterprises
Haydon Mfg. Co.
Kemlite Labs.
Kirkland Co.
Kulka Electric Mfg
Pacific Transducers
Reynolds Electric
Thordarson-Meissner
Tigerman Engrg. Co
United Control Corp
Wallace & Tiernan
Zenith Electric

FLATNESS TESTERS (see also Optical Flats)

Acme Scientific
Baird-Atomic
Bausch & Lomb
Bronoptics Co.
Buhl Optical
Crystal Research Labs
Davidson Mfg.
E & S Optical
Engis Equipt. Co
Fecker, Inc.
Fish-Schurman
Fruengel, Inc.
Gaertner Scientific
Georator Enterprises
Gordon Enterprises
Lab. Optical
Micrometrical Mfg. Co
Opplem Co.
Opto-Metric Tools
Optron Laboratory
Palos Optical
Pan-Technics, Inc.
Phoenix Prec. Instr
Scherr Co., Inc.
Sheffield Corp.
Sherron Metallic Corp.
Van Keuren Co.,
Zeiss, Inc., Carl
Zenith Optical Lab

FLATS, Optical, see Optical Flats

FLAW DETECTORS, Chemical

General Communication
Magnaflux Corp.
Sunshine Scientific

FLAW DETECTORS, Magnetic

Aero Electronics
Annis Co.
Cox Instruments
Detectronic Corp.
Dice Co.,
Eder Instr. Co.
Fraser Devel. Lab.
GE
Magnaflux Corp.
Magnetic Analysis Corp.
Metrol Inc.
Miller Instruments
Minneapolis-Honeywell
  Rubicon Instrs.
Rowe Engrg. Co
Sensitive Res. Instr.
Sunshine Scientific
Western Indust. Engrg

FLAW DETECTORS, Miscellaneous, including Resistance and or Conductivity, also Holiday and Pin Hole Detectors

Automation, Inc
Branson Insts. Inc
Crown Indust. Prods. Co.
Davenport Mfg.
Devtronics, Inc.
Dice Co., J. W.
Electronic Control
Ess Instr. Co.
GE, Apparatus Sales
Gardner Lab.
Hillyer Instr. Co
Industrial Electronics
Indust. Electronics (Mass.)
Magnaflux Corp.
Magnetic Analysis Corp
Menlo Research Lab
Metrol Inc.
Peschel Electronics
Sunshine Scientific
Teletronics Lab., Inc.
U. S. Radium Corp.
Veeco Vacuum Corp
Viking Instr. Co.

FLAW DETECTORS, Radiography, including Beta-ray and X-ray (see also X-ray)

Amer. Tradair Corp
Bar-Ray Prods
Can. Rad. & Uran.
Diamond Power Spec. Corp.
General Communication
GE X-ray Dept.
Menlo Research Lab
North Amer. Philips
Nuclear Corp. of Amer.
Nuclear Electronic
Nuclear Research Corp.
Std. Electronic Res.
U. S. Radium Corp.
Western Radiation Lab

FLAW DETECTORS, Ultrasonic

Branson Instruments
Dice Co., J. W.
DuMont Labs., Inc.
  Allen
Ercona Corp.
Gulton Industries
Magnaflux Corp.
Sperry Products
Sunshine Scientific

FLAW DETECTOR CARS, for Rail Track Testing

Baldwin-Lima-Hamilton
Branson Instruments
Eitzen Co., L. C.
Farnsworth Electronics
Hacker & Co.
Olsen Testing Machine
Sperry Products

FLEXIBLE COUPLINGS, Fractional H. P.

Breeze Corp.
Clifford Mfg. Co
Continental Diamond Fibre
Cook Electric
Electric Tachom. Corp.
Esterline-Angus
Falcon Machine & Tool
Goodrich Co., B. F.
Jan Hardware Mfg. Co
Johnson Co., E. F.
L. & R. Mfg. Co.
Lord Mfg. Co.
Merkle Korff
Millen Mfg. Co.
Parametrics
Phila. Gear Works
Reeves Instr. Corp.
Reflectone Corp
Renbrandt, Inc.
Seamlex Co., Inc.
Servomechanisms, Inc.
Stewart Corp.
Stow Mfg.
Teleflex, Inc.
Vallorbs Jewel Co
Werner Co.,
White Indust. Div., S. S.

FLIGHT TABLES, see Simulators

FLIGHT TEST INSTRUMENTS

Aero Electronics
Aero Res. Instr. Co.
Airborne Instruments
Analogue Controls, Inc.
Applied Science Corp.
Arnoux Corp
Autonetics Div.
Avion Div.
B & F Instrs.
Barton Instr. Co.
Bendix, Pioneer-Central
Boonton Radio
Brooks Rotameter
Brush Instruments
Burton Mfg.
Calif. Tech. Indust.
Cal-Tronics Corp.
Carroll Co., J. B.
Century Electronics & Instr
Colvin Labs., Inc.
Consol. Electrodynamics
Consolidated Avionics
Cox Instruments
Datran Electronics
Davies Labs.
Donner Scientific
Electro Insts., Inc.
Electronic Assocs.
Engrg. & Res. Corp.
Epsco, Inc.
Farnsworth Electronics
Federal Telephone & Radio
Flight Res., Inc.
Ford Instr. Co.
General Devices Inc.
GE
General Mills Inc.
Genisco Inc.
Geotechnical Corp
Giannini & Co.
Goodyear Aircraft
Gordon Enterprises
Gray Instr. Co.
Hamilton Watch
Hastings-Raydist
Hathaway Instr. Co
Helland Div.
Impact Register Co
Industrial Control Co.
Instr. Associates
Intercontinental Dynamics
Kahn & Co.
Kaiser Aircraft & Elect
Kollsman Instr. Co
Lessells & Assocs.
Lewis Engrg. Co
M. B. Mfg. Co.
Marion Electcl. Instr
Matisa Equipt. Co.
Meriam Instr. Co.
Minneapolis-Honeywell
  Boston Div.
  Indus. Div.
  Rubicon Instrs
Natl. Aircraft Corp.
Norden-Ketay Corp
North Amer. Instruments
Pacific Scientific
Parsons Co., Ralph M.
Penn Insts. Div.
Potter Aeronautical Co.
Rahm Insts. Inc.
Revere Corp.
Robertshaw-Fulton
Scientific Enterprises
Sensitive Res. Instr.
Sperry Gyroscope
Statham Labs.
Stavid Engineering, Inc.
Summer Gyroscope Co
Televiso Corp.
Thwing-Albert
Topp Industries, Inc.
Traid Corp
Transistor Devices
U. S. Gauge Div.
United Electrodynamics
WacLine, Inc.
Wallace & Tiernan
Waugh Engrg. Co
Wianko Engrg. Co
Wollensak Optical
Zoomar Corp.

FLOATS, Miscellaneous (see also Level)

Aero Supply Mfg. Co
Amer. Hard Rubber Co
Armstrong Cork
Automatic Control Co
Bristol Co.
Cooper Co., Clark
Goodrich Sponge Prods
Keckley Co.
Kimble Glass
Luzerne Rubber Co
Naugatuck Mfg. Co
Nicholson & Co., W. H.
Parker-Hannifin Corp
Schnitzer Alloy Prods.
Shand & Jurs
Sponge Rubber Prods
Stokes Molded Prods.
Taylor Mfg. Co
U. S. Rubber
Weber Bros. Metal Wks

FLOW, Flowmeters Indicate RATE of flow. For positive or "quantity" fluid meters, see Flow Measuring Devices.

Volumetric Displacement

FLOW CALIBRATING DEVICES, including weighing-displacement types

Ace Glass
Amer. Meter Co
Badger Meter Co.
Barnstead Still
Bendix, Pioneer-Central
Brooks Rotameter Co.
Computer-Measmts. Corp
Curtiss-Wright Corp.
Daystrom Instrument
Eric Instrumentation
Exact Weight Scale
Fischer & Porter Co
GE Apparatus Sales
Hopp Press, Inc.

BAILEY

Fluid Meters

FOR STEAM-LIQUIDS-GASES

● Bailey Fluid Meters are designed to indicate, record, and/or integrate the flow of steam, liquids, or gases under practically any pressure or temperature conditions.

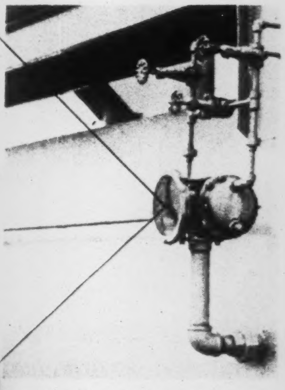
One to four records may be made on a single 12 in. circular chart or two records of flow may be combined in the same case with two integrators or two pneumatic controllers.

Either pneumatic or electric transmission may be used when it is desired to place the Receiver Recorder at a distance from the primary element.

Request Bulletin G15-1.

BAILEY METER COMPANY
1041 IVANHOE ROAD · CLEVELAND, O
Bailey Meter Company Ltd., Montreal, Canada

For more information circle **117** on inquiry card.



you can have

SENSITIVITY
ACCURACY
VERSATILITY
DEPENDABILITY

in a *234

Model 234

Differential Pressure Switch

DIFFERENTIAL PRESSURE RANGES
FROM 0-20" WC TO 0-50 psi
AT SWP TO 6000 psi

For further information write for Bulletin 234-1

BARTON Model 234 Indicating Flow Switch for the petroleum, chemical, utility and process industries, provides a rugged yet highly sensitive instrument for the actuation of visual and audible alarms, and will control pumps or electrical devices. Operating in conjunction with an orifice plate or venturi tube in the main flow line, high or low alarms may be actuated for liquid, steam or gas flow. Consists of a 199 Dual Bellows D.P. Unit with a direct connected pointer and mechanically actuated, snap acting micro switch.

Representation in all principal cities in the U.S.A. and all over the world.

BARTON INSTRUMENT CORPORATION
580 MONTEREY PASS ROAD, MONTEREY PARK, CALIFORNIA

For more information circle **118** on inquiry card.

FLOW METERS

FLOW INDICATORS

ROTAMETERS (for measuring fluid rate of flow): General Purpose, Glass Tube; Armored; Bypass and "T" types for large flows; Transmitting for remote indicating, recording, or controlling rate of flow; Laboratory; Chemical; Alarm; and Purge.

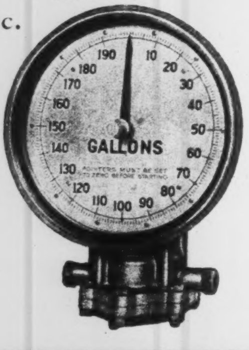
FLOW INDICATORS (for visual observation of fluid flow): Flapper; Rotary; and Ball Flow.

BULLETIN M-1 pictures and describes SK's line of Rotameters and Flow Indicators. Copies are available on request.

Schutte and Koerting COMPANY
INSTRUMENT DIVISION
2225 STATE ROAD, CORNWELLS HEIGHTS, BUCKS COUNTY, PA
For more information circle **119** on inquiry card.

Record -- Control Liquid Volume with NIAGARA METERS

- Chemicals
- Oils & Solvents
- Cold & Hot Water
- Syrups, etc.



Single nutating piston volumetric displacement metering, with integrating registers, or explosion-proof Electricontact construction. Indicating, recording and controlling attachments also available.

Inquire now!

BUFFALO METER CO.
2906 MAIN STREET BUFFALO 14, N. Y.
For more information circle **120** on inquiry card.

Inertial Instrs
Leupold & Stevens
Monostat Corp
Nankervis Co
National Inst. Labs
Neptune Meter Co.
Nuclear Research Corp
Oil Metering & Processing
Parametres, Inc.
Performance Measmts.
Potter **Aeronaut** Corp
Schaevitz Engrg
Security Controls
Selas Corp. of Amer
Sentinal Glass Co
Thayer Scale & Engrg
Thermix Corp.
Toledo Scale Co.
Waugh Engrg Co

FLOW CONTROLLERS

Accessory Prods. Corp
Aero Supply Mfg. Co
AiResearch Mfg. Co
Amer. Meter Co.
Arnoux Corp.
Askania Reg. Co
Askania Werke A. G.
Assembly Products
Autom. Switch Co.
Automation Prods. Inc
B-I-F Industries
Bailey Meter Co.
Barton Instr
Bogue Elect. **Mfg.**
Bristol Co.
Brooks Rotameter
Builders-Providence
Cal-Tronics Corp.
Cash Valve **Mfg.** Corp
Century Controls Corp
Conoflow Corp.
Controls Co. of Amer
Cooper Co., **Clark**
Cutler-Hammer
Denison Engrg. Div
Eclipse Fuel Engr
Fischer & Porter Co
Flow-Actuated Control
Foster Engrg. Co.
Foxboro Co.
Fulton Sylphon Div
Gar Prec. Parts, Inc
GE, **Apparatus Sales**
Genl. **Reg.** Corp
Gordon Co.
Greiner Co., Emil
Hagan Chem. & Controls
Hallikainen Instruments
Hays Corp.
Hays **Mfg. Co.**
Hydraulic Res. & Mfg. Co
Industrial Control Panel
Industrial Electronics
Indust. Instr. Corp.
Infilco
Johnson Service Co
Jordan Co
Jordan **Reg.** Corp
Kates Co. W. A
Leonard Inc., Wallace O
Leslie Co.
Liquidvision Gauge & Con
Magnetrol, Inc
Manning, Maxwell & Moore
Manostat Corp.
Mason-Neilan Div
McDonnell **& Miller**
Metrolog Corp.
Milton Roy Co.
Minneapolis-Honeywell
Moore Products
Nuclear Research Corp
Penn Insts. Div.
Phoenix Prec. Instr
Photobell Co.
Potter **Aeronautical** Co
Power Engrg. & Equipt.
Powers Reg. Co
Proportioneers, Inc.
Ramapo Instr. **Co.**
Reliance Instr. **Mfg.** Corp
Republic **Mfg. Co.**
Research Control Instr. Co
Rivett Lathe **& Grinder**
Rockwell Co., W. S.
Servo-Tek Products
Shallcross Controls
Simplex Valve & Meter Co
Sparling Meter Co.
Squires Co., C. E.
Stratos Div.
Swartwout Co.
Systron Corp
Taller & Cooper, Inc
Taylor Instr. Cos
Texas Instrs., Inc
True-Flo Valve Div
Victory Engrg. Co
Waterman Engrg Co
Waukee Engrg. Co.
Weston Instrs.
Weston Hydraulics

FLOW INSTRUMENTS, Granular Materials

Askania Reg. Co
B-I-F Industries
Bailey Meter Co
Baldwin-Lima-Hamilton
Bin-**Dicator** Co.
Builders-Providence
Control **Engrg.** Co.
Dietert Co.
Fielden Instr. Div.
GE, **X-Ray** Corp.
Gilmore Industries
Hadley **Assoc.**
Industrial **Process Engr.**
Instruments Inc
Jarco Services
Jeffrey **Mfg.** Co.
Merrick Scale Co.
Nuclear Research Corp
Ohmart Corp.
Omega **Machine**
Power Engrg. & Equipt
Proportioneers, Inc
R. K. L. Valve & Mfg
Richardson Scale
Robertshaw-Fulton
Thayer Scale & Engrg
Toledo Scale Co
Wallace & Tiernan

FLOW NOZZLES

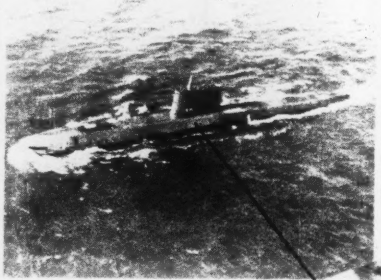
Airflo Instr. Co.
AiResearch Mfg.
Amer. Lava Corp
Artisan MetalProds.
Askania Reg. Co.
B-I-F Industries
Bacharach **Indust. Instr**
Bailey **Meter Co.**
Bristol Co.
Builders-Providence
Engineered Prods.
Foster Engrg. Co
Foxboro Co.
Gar Prec. **Parts,** Inc.
Hagan Chem & Controls
Hays Corp.
Jessup Engrg. **&** Devel. Co
Jordan Reg. Corp.
Keller, Jr., Hugo P
Keller **&** Co.
King **Engrg.**
Minneapolis-Honeywell
OPW Corp
Penberthy Injector Co
Penn **Insts.** Div.
Phoenix Prec. **Instr**
Precision Glass Prods.
Republic Flow Meter
Simplex Valve **&** Meter Co
Taylor Instr. Cos.
Thermix Corp
Willey's Carbide Tool Co.
Worley Jewel Co.

FLOW PICKUPS, Turbine Type (see also Orifice Plates, Venturi Tubes, Pitot Tubes, Flow Nozzles)

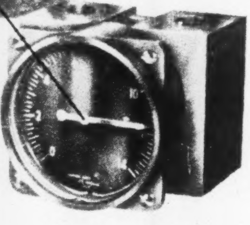
Aerotech **Specialties**
Air Conditioning Equipment Co
Bristol Co
Electro Products Labs.
Fischer & Porter Co.
Nankervis Co
Potter Aeronautical Co.
Propulsion Devel. Lab.
Revere Corp. of Amer
Waugh Engrg. Co.

FLOW PROVERS

Amer. Meter Co
Indust. Instr. Corp.
Oil Metering & Processing
Power Engrg. & Equipt.
Precision Scientific
Superior Meter Co.



MODERN
SMALL
LIGHT
RUGGED
COMPACT
that's
***226**



Completely modern, BARTON Model 226 Indicator provides a compact instrument, measuring only 4" x 4" x 4", weighing less than 5 pounds, is rugged, portable, accurate and versatile in fields of nuclear, missile, aircraft and instrument and automation. Incorporating the patented Barton Rupture-proof Bellows principle, the unit can withstand over-ranges up to the pressure rating of the housing regardless of its differential range. Bellows motion is transmitted through a torque tube to the exterior of the housing. May be calibrated to read in units of flow, liquid level and differential pressure.

***Model 226**
INDICATOR

DIFFERENTIAL PRESSURE RANGES FROM 0-75" WC TO 0-400 PSI AND HOUSINGS RATED FROM 500 PSI TO 6000 PSI

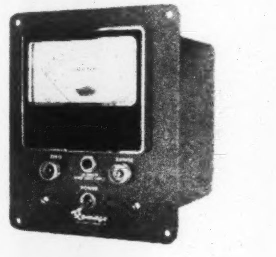
For further information refer to Bulletin 224-1

Representation in all principal cities in the U. S. A. and all over the world

BARTON INSTRUMENT CORPORATION
580 MONTEREY PASS ROAD, MONTEREY PARK, CALIFORNIA
For more information circle **121** on inquiry card.

FOR THE FINEST IN FLOW MEASUREMENT

Specify:
The
MARK V
FLOW
TRANSDUCER



- ACCURATE
- RUGGED
- FAST RESPONSE
- NO MOVING PARTS
- COMPATIBLE SYSTEMS
- LOW SYSTEM COST
- —65° to +300° F

Indicate
Record
Control
with

Ramapo
INSTRUMENT COMPANY, INC.

8 First St.
Bloomingdale, N. J.

For more information circle 122 on inquiry card.

FLOW REGULATORS, Self Operated

Accessory Prods. Corp.
Aero Supply Mfg. Co
Amer. Meter Co.
Askania Reg. Co
Askania-Werke, A. G
B-I-F Industries
Bristol Co.
Brooks Rotameter
Cash Valve Mfg. Corp.
Consol. Electrodynamics
Cutler-Hammer
Fischer & Porter Co
Fulton Sylphon Div.
Gar Prec. Parts, Inc.
Greiner, Emil
Hays Mfg. Co.
Hydraulic Res. and Mfg.
Jordan Reg. Corp.
Kates Co., W. A.
Leonard Inc., Wallace O.
Leslie Co.
Manostat Corp.
McDonnel & Miller
Minneapolis-Honeywell
Moore Products
Phila. Pump & Machy.
Photobell Co.
Potter Aeronaut. Corp.
Propulsion Devel. Lab.
Republic Flow Meters
Research Controls
Robertshaw-Fulton
Simplex Valve & Meter Co
Sparling Meter Co.
Spence Engrg. Co
Squires Co., C. E.
Taller & Cooper, Inc.
Trerice Co., H. O
True Flo Valve Div.
Waterman Engrg. Co
Weston Hydraulics

FLOW TOTALIZERS

Air Conditioning Equip.
Amer. Meter Co
Askania Reg. Co.
Askania-Werke, A. G
Automation Prods. Inc
B-I-F Industries
Bailey Meter Co.
Barton Instr.
Bendix, Eclipse-Pioneer
Bendix, Pioneer-Central
Berkeley Div.
Bristol Co.
Brooks Rotameter
Builders-Providence
Computer-Measmts. Corp
Dymec Corp.
Dynapar Corp.
Electronic Control Sys.
Engineering Res. & Devel
Fischer & Porter Co.
Foxboro Co.
GE Apparatus Sales
Hays Corp.
Henszey Co.
I-L-S Instr. Corp.
Industrial Instr.
Inertial Instrs.
Internat. Instr. Co
Leeds & Northrup
Leupold & Stevens
Librascope, Inc.
Manning, Maxwell & Moore
Mason-Neilan Div.
Maxson Insts.
Minneapolis-Honeywell
National Instr. Labs
Norden-Ketay
Penn Insts. Div.
Potter Aeronaut. Co.
Potter Instr. Co
Ramapo Instr. Co.
Ransom Research
Republic Flow Meters
Revere Corp.
Simplex Valve & Meter Co
Smith Meter
Southw. Indust. Electronics
Sparling Meter Co., Inc
Sparton Cont. Systems
Streeter-Amet
Systron Corp.
Taller & Cooper, Inc.
Taylor Instr. Cos.
Thayer Scale & Engrg.
Wallace & Tiernan
Waugh Engrg. Co.
Weston Instrs.

FLOW TRANSMITTERS (see also Pressure Differential Tranmitters)

Air Conditioning Equipment Corp.
Amer. Meter Co.
Askania Reg.
Askania-Werke, A. G
Automation Prods., Inc.
B-I-F Industries
Bailey Meter Co.
Barton Instr. Co.
Bendix, Pioneer-Central
Bristol Co.
Brooks Rotameter
Cleveland Controls, Inc
Fischer & Porter Co.
Foxboro Co.
GE Apparatus Sales
Hagan Chem. & Controls
Hays Corp.
Indust. Instr. Corp.
Inertial Instruments, Inc.
Leupold & Stevens
Manning, Maxwell & Moore
Mason-Neilan Div.
McDonnell & Miller
Minneapolis-Honeywell
Moore Products
Nankervis Co
Norden-Ketay Corp
Norwood Controls
Penn Insts. Div.
Potter Aeronautical Co.
Republic Flow Meters
Revere Corp. of Amer.
Shand & Jurs Co
Simplex Valve & Meter Co
Sparling Meter Co., Inc.
Sparton Cont. Systems
Swartwout Co
Taller & Cooper, Inc
Wallace & Tiernan

FLOWMETER LEVELLING SADDLES, see Levelling Saddles

FLOWMETERS, Area, Including Cone and Disc Type, Cylinder and Piston Type, Free Float Type

Amer. Gas Furnace Co.
Amer. Instr. Co.
Amer. Measurement & Control, Inc.
Askania Reg. Co.
B-I-F Industries
Bailey Meter Co
Bayley Instr. Co.
Bellco Glass
Bendix-Friez
Bowser Inc.
Bristol Co.
Brooks Rotameter
DeZurick Shower Co
Dwyer Mfg. Co.
Fischer & Porter Co
Fish-Schurman
Gems Co.
Greiner Co., Emil
Greiner Glassblowing Lab
Hallikainen Instruments
Hammel-Dahl
Hays Corp.
Hoke Inc.
Inertial Instrs
Jacoby-Tarbox
King Engrg. Co
Kontes Glass
Leupold & Stevens
Mercury Glass Co.
Minneapolis-Honeywell
Nankervis Co
National Meter Co.
New Jersey Meter Co.
Nuclear Corp. of Amer.
Oil Metering & Processing
Penn Insts. Div.
Phoenix Prec. Instr.
Prec. Glass Prods
Precision Scientific
Schrader's Son, A.
Schutte & Koerting
Service Recorder Co.
Slaughter Co
Sticht Co., Herman M
Taylor Instr. Cos.
Thermco Labs
Waukee Engrg. Co.

FLOWMETERS, Area, Orifice and Plug Type

Amer. Measurement & Control, Inc.
Amer. Meter Co.
B-I-F Industries
Bacharach Indust. Instr. Co
Bailey Meter Co.
Barton Instr. Co.
Bristol Co.
Brooks Rotameter
Builder-Providence
Commercial Iron Works
Cox Instruments
Fischer & Porter
Gems Co
Greiner Glassbowing Labs
Hallikainen Instruments
Hastings Raydist
Hays Corp.
Henszey Co.
Industrial Instr. Corp
Mason-Neilan Div.
Meriam Instr. Co
Metrolog Corp.
Minneapolis-Honeywell
Nankervis Co
Oil Metering & Processing
Precision Scientific
Ramapo Engrg. Co
Republic Flow Meters
Robinson Orifice
Rockwell Register Corp.
Simplex Valve & Meter
Southw. Indust. Eelectron
Taylor Instr. Cos
Trimount Instr. Co.
Wallace & Tiernan

FLOWMETERS, Electromagnetic, including Turbine

Aero Res. Instr. Co.
Air Conditioning Equipment Corp.
Automation Prods. Inc.
Berkeley Div.
Crescent Engrg. & Res. Co
Fischer & Porter Co
Foxboro Co.
Gems Co.
Hydraulic Controls Co
Instr. Associates
Intercontinental Dynamics
Maxson Instr. Div
Nuclear Corp. of Amer
Potter Aeronautical Co
Revere Corp.
Sparton Cont. Systems
Technical Equipt. Co.
Waugh Engrg. Co

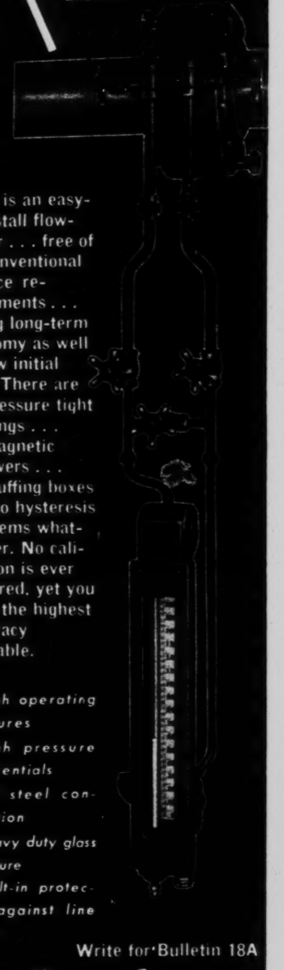
FLOWMETERS, Inferential Type, Including Orifice, Nozzle, Pitot, Venturi for Air, Gas, Liquid or Steam; Indicating and/or Recording

Ace Glass, Inc
Aero Research

UNMATCHED ACCURACY

in direct flow indication

Wherever you seek simplicity and high accuracy in flow measurement at lowest cost, the Meriam "H" Meter is the well-known answer.



Here is an easy-to-install flowmeter . . . free of all conventional service requirements . . . giving long-term economy as well as low initial cost. There are no pressure tight bearings . . . no magnetic followers . . . no stuffing boxes . . . no hysteresis problems whatsoever. No calibration is ever required, yet you have the highest accuracy available.

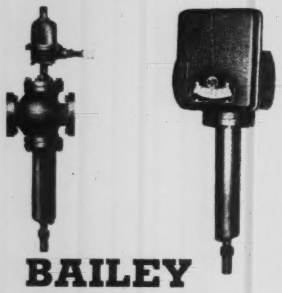
★ High operating pressures
★ High pressure differentials
★ All steel construction
★ Heavy duty glass enclosure
★ Built-in protection against line surges

Write for Bulletin 18A

Meriam Manometer Instrumentation
...for pressures, vacuums, flows, liquid levels.

meriam
INSTRUMENT COMPANY
10920 Madison Ave. • Cleveland 2, Ohio

For more information circle 123 on inquiry card.



BAILEY
AREA METER TRANSMITTERS

Transmits a signal which is directly proportional to rate of flow to indicating, recording, integrating, and/or controlling equipment at remote stations.

For rate of flow measurement of water, kerosene, gasoline, oil, tar, chemicals, distillates, and refrigerants. Measures rate of flow over a 50 to 1 range. Mounts directly in pipe line.

Signals may be transmitted either electrically or pneumatically.

Request Product Specification E22-4 for electric transmission and Product Specification P22-4 for pneumatic transmission.

BAILEY METER COMPANY
1041 IVANHOE ROAD CLEVELAND, O.
Bailey Meter Company Ltd., Montreal, Canada

For more information circle **124** on inquiry card.

AiResearch Mfg
Airflo Instr. Co.
Amer. Measurement & Control, Inc
Amer. Meter Co.
Askania Reg. Co.
Askania-Werke, A. G
Automatic Timing & Controls
B-I-F Industries
Bacharach Indust. Instr
Bailey Meter Co.
Barton Instr. Corp.
Bendix, Eclipse-Pioneer
Bendix-Friez
Bethlehem Apparatus
Bristol Co.
Brooks Rotameter
Builders-Providence
Cambridge Instr. Co.
Campbell Co.
Central Scientific
Commercial Iron Works
Corning Glass Works
Crescent Engrg. & Res.
Custom Scientific
Daniel Orifice Fitting
Dwyer Mfg. Co.
Dynamic Instr. Co.
Elematic Equipt. Corp
Ellison Draft Gage
Fischer & Porter Co.
Flow Corp.
Foster Engrg. Co.
Foxboro Co.
Gems Co.
Green Rectifier Co
Greiner Co., Emil
Greiner Glassblowing Lab.
Griebel Co.
Hagan Chem. & Controls
Hastings-Raydist
Hays Corp.
Hill & Co.
Hoke, Inc.
Hydraulic Controls Co
Ideal-Aerosmith
Illinois Testing Labs.
Industrial Instr. Corp.
International Filter
King Engrg.
Kollsman Instr. Div.
Leeds & Northrup
Leupold & Stevens
Liquidepth Indicators
Liquidvision Gauge & Con
Manning, Maxwell & Moore
Mason-Neilan Div.
Maxson Corp., W. L.
Maxson Instr. Div.
Meriam Instr. Co.
Minneapolis-Honeywell
Moore Products
N. J. Meter
Oil Metering & Processing
Penn Insts. Div.
Permutit Co.
Phoenix Prec. Instr.
Pitometer Log Corp.
Precision Scientific
Prec. Thermom. & Insts
Precision Tube Co.
Ramapo Instr. Co.
Republic Flow Meters
Revere Corp.
Robinson Orifice
Rockwell Mfg. Co.
Schutte & Koerting
Scientific Glass App.
Scientific Instr. Co.
Shand & Jurs Co
Simplex Valve & Meter Co
Southw. Indust. Electron.
Superior Meter
Task Corp.
Taylor Instr. Cos.
Trimount Instr. Co
Turner Electric
Uehling Instr. Co.
U. S. Gauge Div.
Universal X-Ray Prods
Wallace & Tiernan, Inc
Wiancko Engrg

FLOWMETERS, Magnetic

Fischer & Porter Co
Foxboro Co.

FLOWMETERS, Open Channel, Including Flume, V-notch, Weir (see also Waste)

Aero Supply Mfg. Co
B-I-F Industries
Bailey Meter Co.
Bristol Co
Builders-Providence
DeZurik Shower Co
Elect. Indicator Corp
Fielden Instr. Div.
Fischer & Porter Co
Foxboro Co.
Gurley, W. & L. E.
Hagan Chem. & Controls
Hays Corp.
Industrial Instr. Corp.
Jordan Reg. Corp
Leupold & Stevens
Mason-Neilan Div.
Minneapolis-Honeywell
Penn Insts. Div.
Republic Flow Meters
Scientific Instr. Co. Calif
Simplex Valve & Meter Co
Sparling Meter
Swartwout Co.
Taylor Instr. Cos.
Trans-Weigh Co
Victory Engrg. Corp
Westberg. Mfg. Co.
White Co.

FLOWMETERS, Open-Stream, see Flowmeters, Open Channel

FLOWMETERS, Positive Displacement, Including Consumer Gas Nutating Pistons or Disc. Oscillating Piston, Propeller, Reciprocating Piston and Rotary Piston, Water Meters, etc.

Aero Supply Mfg
Air Conditioning Equip
Amer. Instr. Co.
Amer. Meas. & Control
Amer. Meter Co.
Askania Reg. Co.
B-I-F Industries
Badger Meter Co
Bailey Meter Co.
Baldwin-Lima-Hamilton
Barton Instr. Corp.
Bowser, Inc
Bristol Co.
Brodie Co.
Brooks Rotameter
Buffalo Meter Co.
Builders-Providence
Cal-Tronics Corp.
Cox Instruments
Crescent Engrg. & Res
Electrical Devel.
Engineering Res. & Devel
Fischer & Porter Co
Foxboro Co.
Gems Co.
Gilmore Industries
Gurley, W. & L. E
Hagan Chem. & Controls
Hays Corp.
Henszey Co.
Hetherington & Berner
Hoke, Inc
Industrial Instr.
Jarco Services
Labline, Inc.
Lapp Insulator
Mason-Neilan Div.
Maxson Corp.
Minneapolis-Honeywell
Moore Products
National Inst. Labs
Neptune Meter Co.
Nuclear Research
Oil Metering & Processing
Phoenix Prec. Inst
Potter Aeronautical Co.
Precision Scientific
Proportioneers, Inc
Ramapo Engrg. Co.
Republic Flow Meters
Revere Corp.
Richardson Scale Co.
Rockwell Mfg. Co.
Service Recorder Co
Schutte & Koerting
Shand & Jurs Co.
Smith Corp., A. O.
Smith Meter Co.
Sparling Meter Co
Sprague Meter Co.
Streeter-Amet
Superior Meter Co
Technical Equipt. Co
Thayer Scale & Engrg.
Trimount Instr. Co.
Uehling Instr. Co.
Virginia Electronics
Victory Engrg. Corp.
Waugh Engrg. Co.
Westport Electric
Worthington Pump
Yellow Springs Instr.

FLOWMETERS, Positive Displacement, Low Flow

Aero Supply Mfg. Co.
Air Conditioning Equip.
Amer. Meas. & Control
Amer. Meter Co.
Askania Reg. Co.
Brodie Co., Ralph N.
Crescent Engrg. & Res.
Fischer & Porter
Gems Co.
Hastings-Raydist
Hays Corp.
Hetherington & Berner
National Instr. Labs.
Neptune Meter Co.
Nuclear Corp. of Amer.
Oil Metering & Processing
Penfield Mfg. Co.
Photocon Res. Prods.
Revere Corp. of Amer.
Roots-Connersville Blower
Service Recorder Co.
Superior Meter Co

FLOWMETERS, Sight

Amer. Gas Furnace
Bausch & Lomb
Bowser, Inc.
Brooks Rotameter
Builders-Providence
DeJur-Amsco
Fischer & Porter Co.
G-M Labs.
GE
Henszey Co.
Infilco
Jacoby-Tarbox
Jerguson Gage
Jordan Reg. Corp
King Engrg. Corp
Liquidivision Gauge & Con.
McIntosh Equipment
Meyer-Opticraft
Penfield Mfg. Co
Phoenix Prec. Instr
Prec. Glass Prods Co.
Republic Mfg.
Revere Corp. of Amer
Sarco Co
SCAM Instr. Corp.
Schutte & Koerting
Shand & Jurs
Selas Corp
Trimount Instr.
Trinity Equipt. Co.
Triplett Electcl. Instr.
Uehling Instr. Co.
Waukee Engrg. Co.

FLOWMETERS, Vane Type

Air Conditioning Equip
Bendix-Friez
Bendix, Pioneer-Central
Crescent Engrg. & Res.
Eclipse Fuel Engr
Elematic Equipt. Corp
Fischer & Porter
Hays Corp.
Henszey Co.
Illinois Testing Labs
Industrial Instr. Corp
Jordan Reg. Corp
Mason-Neilan Div.
Penn Insts. Div
Potter Aeronautical Co
Power Engrg. & Equipt
Revere Corp.
Scully-Jones
Simplex Valve & Meter
Sparling Meter Co.
Sperry-Son Well Surveying
Standard Controls, Inc.
Waugh Engrg. Co.

FLUE GAS ANALYZERS, see Gas Analyzers, also Combustion

FLUID METERS, GAS, see Flowmeters, Positive Displacement

FLUID METERS, Liquid, see Flowmeters, Positive Displacement

FLUID METERS, Quantity, see Flowmeters, Positive Displacement

FLUORESCENCE INDICATORS

Amer. Instr. Co.
Basic Controls, Inc.
Can Rad. & Uran.
Gardner Lab.
GE X-Ray Dept
Nuclear Corp. of Amer
Phoenix Prec. Instr
Sampson Chem. & Pigm.

FLUORESCENT CHEMICALS

Baker Chem. Co.
Burton Mfg. Co.
Can. Rad. & Uran.
DuPont
Laboratory Specialties
Metalphoto Corp.
Nuclear Corp. of Amer
Precise Measmts. Co
Sampson Chem & Pigm
Switzer Bros.
Sylvania Elect. Prods
Ultra-Violet Prods., Inc
U. S. Radium Corp.

FLUORESCENT LIGHTING TESTERS

Eitzen Co.
GE Lamp Div
Ideal Industries
Littlefuse, Inc.
Menlo Research Lab
Sylvania Elect. Prods

FLUORESCENT MATERIALS, see Luminescent

FLUORESCENT MERCURY VAPOR TUBES, see Light Sources

FLUOROMETERS

Amer. Instr. Co.
Beckman Div.
Biddle Co., James G
Calectron, Inc.
Coleman Insts.
El Dorado Electronics
Farrand Optical
Fisher Scientific
Gardner Lab.
Jarrell-Ash
Pfaltz & Bauer
Phoenix Prec. Instr
Photovolt Corp.

FLUOROSCOPES

Dice Co.
GE
Kelley-Koett
North Amer. Philips Co
Patterson Screen Div.
Picker X-Ray Corp.
Universal X-Ray Prods.
Westinghouse Electric
Westinghouse, X-Ray

FLUX, Brazing, Soldering, Welding

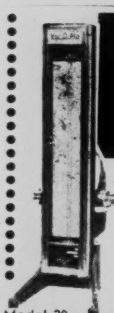
Air Reduction Sales
Allen Co., Inc.
Alpha Metals
Aluminum Co. of America
Amer. Platinum Wks.
Amer. Silver Co.
Atkins & Co.
Bastian Bros.
Belmont Smelt. & Ref.
Chase Brass & Copper
Division Lead Co
Dixon, Inc.
DuPont
Fansteel Metallurgical
Federated Metals Div.
Fusion Engrg. Co.
GE
Grayhill
Handy & Harman

FLOW CORPORATION
advanced flow measuring instruments
for industry and research

leaders in hot wire anemometry
special pressure probes
micromanometers

85 Mystic St. Arlington 74, Mass.

For more information circle **125** on inquiry card.



Vol-O-Flo Linear Gas Flowmeter
For Laboratory Plant Special Equipment
ACCURATE • RUGGED • ADAPTABLE

Meters using laminar flow elements have the highest potential accuracy possible. Accuracy is independent of pipe run. Convenient to use. Available for table, pipe, wall, or flush mounting. Specials to order: Pressure to 2000 psig, temperature to 500° F, overflow checks, H-assemblies. Dial indicator type (Model 30) and element only (Model 10, for customer secondary device) are also available. WRITE FOR BULLETIN.

NATIONAL INSTRUMENT LABORATORIES, INC.
828 Evarts St., N.E.
Washington, D. C.

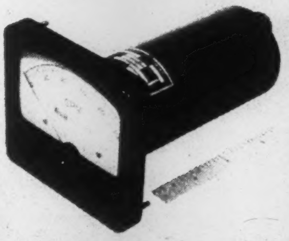
For more information circle **126** on inquiry card.

Measurement Control

Waugh

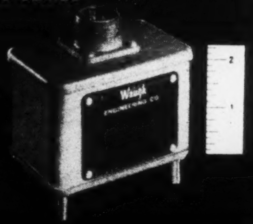
Six precision measurement devices . . . a sampling of the many developed through Waugh's creative engineering. When planning for the most advanced systems, take advantage of Waugh's ability to meet tomorrow's requirements today.

FLOW RATE INDICATOR FR-305



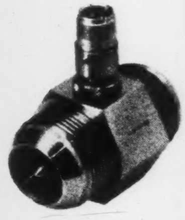
Combines indicating meter with transistorized frequency-to-voltage converter in a single compact package.
- Optional 115v ac or 28v dc power supply.
- Accurate to 1% of full scale.
- Custom scales for all flow ranges and measurement units.
- 250° scale instruments also available.

TRANSISTORIZED FREQUENCY-TO-VOLTAGE CONVERTER FR-300 SERIES



For flow rate or R.P.M. measurements. Combines compact size with high stability and precision.
- 3" x 2" x 2⅛" overall size.
- 0-5 volts output. 0-1 milliampere also available.
- Better than .002% per degree temperature coefficient.

TURBINE FLOW SENSOR FL SERIES

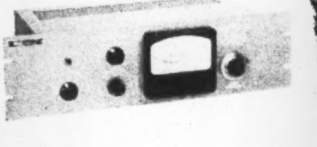


Converts fluid flow into A.C. frequency proportional to flow rate.
- Exclusive design features low pressure drop . . . high reliability.
- Special series available for gas measurement.
- High frequency models measure flow transients up to 50 cps.

TRANSISTORIZED FREQUENCY DETECTOR FD-100

Provides instantaneous trip signal when input frequency goes above or below preselected limit.
- Used as overspeed trip with tachometer generators or as flow limit switch with turbine flow sensors.
- Trip point accurate within 1%.
- Response time 10 milliseconds maximum.
- 28v output to operate solenoid or relay.

PULSE RATE CONVERTERS SERIES FR-100 AND 200



For converting frequency output of turbine flowmeters or tachometer generators into a DC signal.
- Cabinet or relay rack styles.
- Multiple input channels with built-in indicator.
- 5 to 3000 cps. input frequency range.
- High frequency model gives transient response to 50 cps.

FLIGHT REFUELING FLOWMETER

Used in tanker aircraft to register total fuel transferred.
- Complete system includes sensor and indicator only; no intermediate devices.
- All-transistor circuitry provides high reliability; no mechanical switches.
- Includes circuit to turn on indicator light when fuel is flowing.

Bulletins giving complete physical and technical data on these and other Waugh products will be sent on request. Our engineering staff is available to assist in the development and manufacture of other precision components you may require.

Waugh

ENGINEERING CO.

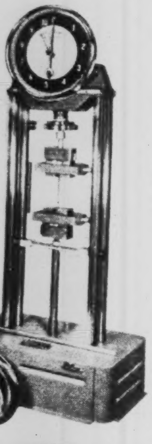
7842 Burnet Ave. • Van Nuys, Calif.

Sales representatives in principal cities

For more information circle **127** on inquiry card.

DILLON PRECISION PRODUCTS

ILLUSTRATED BELOW ARE A FEW OF THE MORE POPULAR DILLON INSTRUMENTS WHICH ARE IN USE IN LEADING PLANTS, BY SCHOOLS AND UNIVERSITIES AND BY MOST GOVERNMENTAL DEPARTMENTS. ALL ARE AVAILABLE FOR PROMPT SHIPMENT.



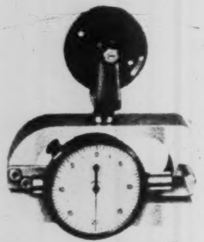
MODEL L UNIVERSAL TESTER

A high capacity universal tester for tensile, compression, transverse and shear work. Portable and easy to operate. For cloth, wire, springs, wood, metals, castings, plastics, etc.

Calibrated with elastic proving ring. Extreme accuracy. Available in 7 different capacities from as low as 0-250 lbs. up to 0-10,000 lbs. A 5" dia. or 10" dia. dial is optional.

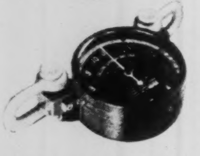
Handles standard round or flat specimens with ease and simplicity. Regular grips for flat specimens can be removed in seconds and replaced with any type of special gripping fixture.

Standard model is hand operated. Used on work bench. Can be supplied motorized to ASTM specs. if desired. America's finest low cost tester!



MECHANICAL FORCE GAUGE

This versatile instrument has unlimited application. For measuring mechanical, static or moving loads. Wide variety of adapting fixtures may be used with it. Illus. shows moving wire passing over pulley to indicate tension. 11 capacities. Jeweled dial indicator. From as low as 0-10 lbs. up to 0-50,000 lbs.

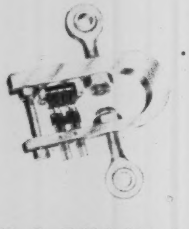


TRACTION DYNAMOMETER

Ideal for shop, laboratory or field use in determining static loads or tensile strains on objects that are too large or cumbersome for conventional testing machines. Reads directly in lbs. Thirteen different capacities from as low as 0-500 lbs. up to 0-150,000 lbs. More than 100 different uses.

DIAL THERMOMETERS

Accurate to 1% of the range over entire scale. Stainless steel construction. Large, easy-to-read dials 1", 2¼", 3" or 5" diameters. Wide variety of working ranges to suit every requirement in both Fah. and Centigrade. Provided with ½" or ¼" mounting nuts, and stem lengths from 3" up to 80". Special ranges or dial layouts to order. Also available in popular straight form.



FORCE CONTROL SWITCHES

For automatic controlling of mechanical forces at various load points. Accurately controls motors, lights remote control signals, operates warning devices. Ideal safety device for overhead hoists. Available in tensile or compression. Furnished with from 1 to 4 adjustable switches for controlling forces at countless load points. 6 different ranges from 0-100 lbs. to 0-50,000 lbs. Protected against accidental overloading. Can be set for most critical accuracy.

W. C. DILLON & CO., INC.

14616 Keswick St.
Van Nuys 57, Calif.
(suburb of Los Angeles)
STATE 5-3168

Write for Illustrated Literature on Any or All of the Above

For more information circle 128 on inquiry card.

Harshaw Chemical
Hi-Grade Alloy Corp
Hubbell Metals, Inc.
Imperial Brass Mfg Co
Johnson Gas Appliance
Kester Solder Co.
Krembs & Co.
Linde Co.
Mallory & Co., P. R
Marshall Co
Mico Instr Co
National Cylinder Gas
Ney Co.
Ohio Carbon Co
Sherman & Co.
Superior Flux Mfg Co
Technical Soldering Co.
Wall Colmonoy Co.
Westinghouse Electric

FLUXMETERS, see Magnetic Field Strength Indicators

FOIL, Precious Metals (see also Ribbon)

Alpha Metals
Amer. Platinum Wks
Amer. Silver Co
Baker & Co.
Bishop & Co., J.
Cohn Corp., Sigmund
Fansteel Metallurgical
General Plate Div.
Hamilton Watch
Handy & Harman
Ney Co.
Paul & Stein Bros
Reynolds Metals Co
Secon Metals Corp
Sherman & Co.
Staver Co., Inc.

FOLDING ENDURANCE TESTERS, Paper, see Paper Test

FOOT CANDLE INDICATORS, see Illumination Instruments

FORCE MEASURING EQUIPMENT (see also Torque)

Aero Electronics
Allegany Instr. Co
Asch Equipt. Co.
Askania Reg. Co.
Askania-Werke, A. G
Atlantic Research
Autom Timing & Controls
Avion Div.
B & F Instr.
Baldwin-Lima-Hamilton
Bristol Co.
Brush Instruments
Bush Assocs.
Cal-Ohm Labs.
Chatillon & Sons
Cleveland Controls
Consol. Electrodynamics
Crescent Engrg. & Res. Co
Daytronic Corp.
Denison Engrg. Div
Dillon & Co.
Donner Scientific
Dynametrics Corp
Emery Co.
Endevco Corp
Engineering Res & Devel
Exline Engrg. Co.
Fairbanks, Morse & Co
Ferner Co., R. Y.
GE, Apparatus Sales
Genisco, Inc.
Gilmore Industries
Gulton Industries
Hagan Chem. & Controls
Hunter Spring Co.
Indikon Co.
Industrial Electronics
Industrial Engrg. Corp
Kistler Instr. Corp.
Lessells & Assocs.
Link Engrg. Co.
Martin-Decker Corp.
Morehouse Machine
North Amer. Insts.
Pacific Scientific
Polyphase Instr.
Radiation, Inc.
Republic **Flow Meters**
Rockwell **Engrg.** Co.
Schaevitz Engineering
Statham Instrs.
Steel City Testing Machs
Stewart Instr. Co.
Task Corp.
Taylor Instr. Cos
Testing Machines, Inc.
Webster Instr. Inc.
Wiancko **Engrg.** Co.

FOREWARN DETECTORS, for Locating Hidden Weapons, see Metal Detectors

FORGINGS, Small, Precision

Aluminum Co. of Amer
Chase Brass & Copper
Gorton Mach. Co.
Haynes Stellite
Jessop Steel
Keystone Carbon Co.
Mallory & Co., P. R
Reynolds Metals Co.
Scovill Mfg. Co
Stafford Co.
Titan Metal Mfg Co.

FORKS, Synchronization

Amer. Time Prods.
Elect. Tachometer Corp
Gaertner Scientific

Leeds & Northrup
MacLeod & Hanopol
McShan Devel Co
Philamon Labs
Riverbank Labs.
Times Facsimile Corp
Welch Mfg. Co., W. M

FORKS, Tuning, Including Electrically Driven

Allied Products Div
Amer. Instr. Co.
Amer. Time Prods
Bunnell Co.
Cambridge Instr. Co
Central Scientific
Chatillon & Sons
Chicago Apparatus Co
Electronic Prods. Co.
Elect. Tachom. Corp
Fecker, Inc.
Gaertner Scientific
GE
General Radio
Hathaway Instr. Co
Heiland Div.
Hormell Instr. Co.
Industrial Test Equipt
Leeds & Northrup
McShan Devel. Corp
Metron Instr. Co.
Muirhead Instrument
Narda Corp.
Philamon Labs.
Phipps & Bird
Riverbank Labs.
Sherron Metallic Corp
Standard Elect. Time
Stoelting Co.
Times Facsimile Corp
Varo Mfg. Co.
Welch Mfg. Co., W. M

FORKS, Vacuum Driven

Cambridge Instr. Co
Gaertner Scientific
General Radio
Industrial Test Equipt
McShan Devel. Corp.
Muirhead Instrument
Philamon Labs.
Riverbank Labs.
Times Facsimile Corp

FRACTIONAL HORSEPOWER MOTORS, see Motors, Fractional Horsepower

FRACTIONATING COLUMNS, see Distillation

FREENESS TESTERS

Bristol Co.
Dietert Co.
Testing Machines, Inc
Williams Apparatus Co

FREQUENCY ANALYZERS, see Spectrum

FREQUENCY CHANGERS

American **Electronics**
Amer. Mach. **& Foundry**
Bekey Electric
Boonton Radio
Carter Motor Co.
Consolidated Avionics
Daven Co.
Davenport **Mfg.**
Eastern **Air Devices**
Elcor, Inc.
Electric Motors & Specs
Electronic Spec. Co
GE, Apparatus Sales
GE, Low Volt. Switchgr
I-L-S Instr. Corp.
Indust. **Test** Equipt. **Co.**
Kato Engrg.
Lampkin Labs., Inc.
Menlo Park Engrg.
Metrolog Corp.
National Co.
Opad Electric Co
P & H Electronics
Perkin Engrg. Co.
Philamon Labs.
Radio City Products
Radio Frequency Labs
Radionics
Sorensen & Co.
Technical App. Builders
Tel-Instr. Elects. Corp.
Varo Mfg. Co.
Vickers, Inc.
WacLine, Inc.
Walker Div.
Western Design & Mfg
Westinghouse Electric

FREQUENCY CONTROLLERS

A-V Mfg. Corp.
Amer. Mach. **& Foundry**
Berkeley Div.
Browning **Labs.**, Inc
Consolidated **Avionics**
Electronic Spec. Co.
Erie Instrumentation
Feller Engrg.
GE
Hallikainen Insts.
Hormell Instr. Co.
I-L-S Instrument
Kellogg Switchboard
Leeds & Northrup
Magnetic Instr. Co
Magnetic Res. Corp
Maxson Instr. Div.
Metrolog Corp.
National Co.
Photometer Log Corp.
Potter **Aeronautical** Co

Potter Instr. Co
Radio City Products
Servo Corp. of Amer
Std. Electronic Res
Stewart Instr. Co
Systron Corp.
Thompson Products
Varo Mfg. Co.
WacLine, Inc
Waugh Engrg. Co

FREQUENCY INDICATOR STANDARDS, see Standards, Frequency

FREQUENCY INDICATORS and or RECORDERS, Electronic

Ad-Yu Electronics Labs
Aero Instr. Co.
Air-O-Tronics
Aircraft Armaments
Alden Electron & Impulse
American Electroneering
Amer. Mach. & Foundry
Avion Div.
B & H Instr. Co
Berkeley Div
Berkshire Labs.
Biddle Co., James G
Bristol Co.
Browning Labs.
Brush Instruments
Clarke Instr. Corp
Computer Co. of Amer.
Computer-Measmts. Corp
Conn. Ltd.
Consolidated Avionics
Daven Co.
Davenport Mfg Co
DeJur Amsco
Detectron Co.
Diamond Antenna & Microwave
Diatron Co.
Donner Scientific
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Lavorie Labs.
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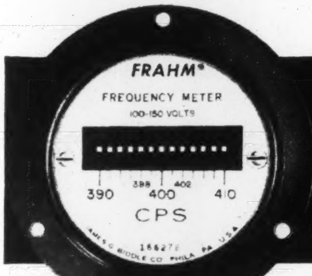

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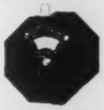
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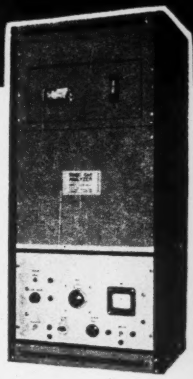

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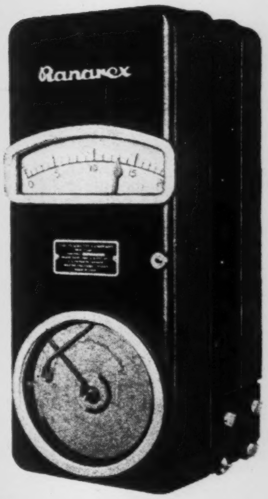

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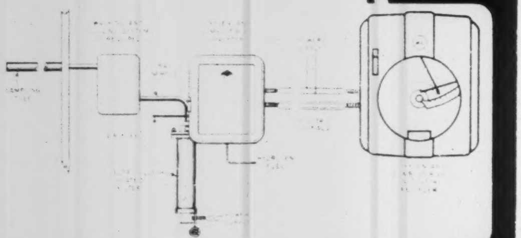

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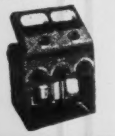

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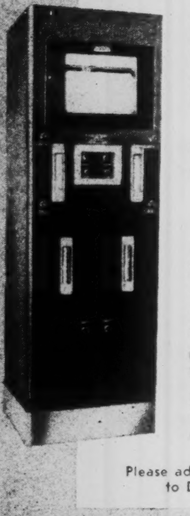

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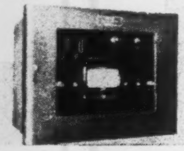

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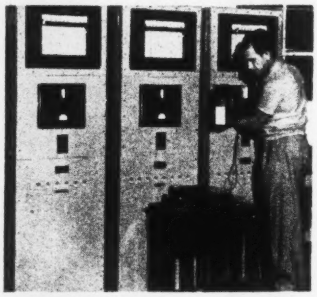

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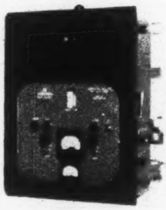

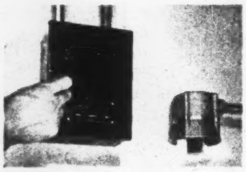

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Richardson Co.
Rotating Components
Scherr Co.
Seegers Mfg.
Servomechanisms, Inc.
Seth Thomas Div.
Shakeproof, Inc.
Smith Machine Co.
Spaulding Fibre Co.
Specialty Screw Mach.
Sphinx American Co.
Steel Co., Herman D.
Sterling Precision Corp.
Sterling Prec. Instr. Co.
Swiss Amer. Jewel-Bearings
Swissmatic Products
Tech. Oil Tool Corp.
Telex, E-A Div.
Thomas Clock
Thompson Clock Co.
Transicoil Corp.
Triplex Machine Tool
U. S. Gear Corp.
Vallorbs Jewel Co.
Vocaline Co. of Amer., **Inc.**
Waldom Electronics, Inc.
Western Design & **Mfg.**
Western Gear Corp.
Westinghouse Electric
Wilder, Inc.
Winzeler Mfg. & Tool Co.
Zagora Gears, Inc.

GEIGER-MUELLER COUNTERS, see Radioactivity

GEIGER-MUELLER TUBES, see Tubes, Geiger Mueller

GENERATORS, AC

AiResearch Mfg. Co.
Amer. Electronics
Avion Div.
Bekey Electric
Bendix, Eclipse-Pioneer
Bendix-Friez
Bendix, Red Bank
Bogue Electric Mfg.
Brush Instruments
Columbia Electric Mfg
Consolidated Avionics
Cubic Corp.
Cyclohm Div.
D & R, Ltd.
Dalmotor Co.
Donner Scientific
Eastern Air Devices
Elcor, Inc
Electric Indicator Co.
Electric Spec. Co.
Electro Engrg. Prods. Co.
Electro Mechano
Electronic Instr. Co.
El Ray Motor Co.
Fairbanks, Morse & Co.
GE, Apparatus Sales
Geophysical Instrument
Georator Corp.
Globe Industries
Helipot Div.
Hewlett-Packard
Holtzer-Cabot
Indust. Test Equipt. Co.
Industrionics
Inet-Palmer Div.
Instrument Motors **Co.**
Interelectronics Corp.
Kato Engrg.
Kearfott Co.
Kellogg Switchboard
Krohn-Hite
Kollsman Instr. Corp.
Lear, Inc.
Leland Electric
Magnetic Instr. Co.
Marble-Card Electric
Marconi Instruments
Master Electric
National Pneumatic Co.
Oster Mfg. **Co.**
PM Industries
Rotating Components
Sangamo Electric
Servo Corp.
Servomechanisms, Inc.
Siemon Engrg. Co.
Simpson Electric
Small Motors, Inc.
Syntorque, Inc.
Task Corp.
U. S. Instr. Corp.
Vectron Inc.
WacLine, Inc.
Western Gear Corp.
Westinghouse Electric
Weston Instr.

GENERATORS, Complex Wave

Amer. Electronic Mfg.
Bekey Electric
Bendix Aviation Corp.
Berkeley Div.
Berkshire Labs.
Cal-Tronics Corp.
Clegg Labs., Inc.
Cubic Corp.
Detroit Controls Corp.
Electro-Mec Lab.
Electro-Pulse, Inc.
Electrol, Inc.
Electronic Res. **Assocs.**
Empire Devices Prod.
Fed. Telephone & Radio
F.R. Machine Works
GE
Hickok Elec. Instr.
Howard Industries
Intercontinental Dynamics
International Telemeter
Kay Electric Co.
Krohn-Hite
Lavoie Labs.
Magnetic Instr. Co.
Marconi Instruments
Nalley, Leonard L.
Nuclear Electronics
Radio City Products
Rutherford Electronics
Servo Corp. of Amer.
Tektronix, Inc.
Telechrome, Inc.
Tel-Instr. Electronics
Wang Labs., Inc.
Waters Mfg.

GENERATORS, DC

Aircraft Radio Corp.
AiResearch Mfg. Co.
American Electronics
Bekey Electric
Bendix, Eclipse-Pioneer
Bendix, Red Bank
Bogue Electric Mfg.
Breeze Corporations
Cal Tronics Corp.
Carter Motor Co.
Columbia Electric Mfg.
Consolidated Avionics
Cyclohm Div.
Cubic Corp.
Dalmotor Co.
Detroits Controls Corp.
Devtronics, Inc.
Eastern Air Devices
Elcor, Inc.
Electric Indicator Co.
Electric Spec. Co.
Electro Engrg. **Prods.**
Electro Mechano
Electronic Instr. Co.
Electronic Res. **Assocs.**
El Ray Motor Co.
Esterline-Angus
Fairbanks, Morse & Co.
Federal Telephone & Radio
GE, Apparatus Sales
Geophysical Instr. Div.
Georator Corp.
Globe Industries, Inc.
Holtzer-Cabot
Howard Industries
Hycon Electronics
Inet-Palmer Div.
Instrument Motors Co.
Interelectronics Corp.
Jack Scient. Co., Bill
Lear Inc.
Lectronic Research
Leland Electric
Magnetic Instr. Co.
Marble-Card Electric
Master Electric
National Pneumatic Co
Oster Mfg. Co., John
PM Industries
Reliance Elect. & Engrg
Sangamo Electric
Servo Tek Products
Siemon Engrg. Co.
Small Motors Inc.
Spencer-Kennedy
Thordarson-Meissner
Western Gear Corp.
Weston Instr.
Westinghouse Electric

GENERATORS, Pulse

ACF Electronics **Div.**
ARF Products
Aircraft Radio Corp.
Alto Scientific
Amerac, Inc.
Amer. Electronic Labs
Arenberg Ultrasonic Lab
Avion Div.
BJ Electronics
Baird-Atomic
Bekey Electric
Berkeley Div.
Berkshire Labs.
Reva Lab.
Burroughs Electronics
Cal-Tronics Corp.
Canoga Corp.
Clegg Labs., Inc.
Computer Control **Co.**
Computer Instruments
Consolidated Avionics
Cooper Dev. Corp.
Corbett Science **Labs.**
Cubic Corp.
Detectolab, Inc.
Devtronics, Inc.
Digital Equipment
Dormitzer Elec. & **Mfg.**
DuMont Labs., Allen B.
Electro Products Labs.
Electro-Pulse, Inc.
Empire Devices Prod.
F.R. Machine Works
Farnsworth Electronics
Feller Engrg. Co
General Communication
General Radio
Grass Instr. Co.
Hamner Electronics
Hewlett-Packard
Hickok Elec. Instr.
Hycon Electronics
Internat. Telemeter Corp.
Kato Engrg.
Kay Electric
Kearfott (Western)
Lavoie Labs.
Levinthal Electronic **Prods.**
Magnetic Research Corp.
Manson Labs.
Marconi Instruments
Measurements Corp.
Menlo Park Engrg.
Minatron Corp.
NJE Corp.
Newark **Electric Co.**
Northeast Scientific
Nuclear Electronics
Nuclear **Measurements**
Orbitran Co.
Packard Bell-Electrns. Div.
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Potter Instr. Co.
Precise Devel. Corp.
Radex Corp.
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Radiation Instr. Dev. Lab
Radiation Instr. Co.
Ransom Research
RCA
Rese Engrg., Inc
Rutherford Electronics
Shepard Lab.
Simpson Electric Co
Spencer-Kennedy
Std. Elect. Time
Sterling Precision
Stoddart Aircraft Radio
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Thordarson-Meissner
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Universal Transistor
Vectron, Inc.
Walkirt Co.
Wang Labs., Inc
Weinschel Engrg. Co

GENERATORS, Signal

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Airborne Instruments
Aircraft Radio Corp.
Allied Radio Corp.
Amerac, Inc.
Amer. Electroneering
Amer. Time Prods.
Authorized Mfrs. Service
Automatic Electric
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Bekey Electric
Boonton Radio
Borden Engrg. Co
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Crystal Research Labs
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D & R Limited
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Datascan Inc.
Donner Scientific
DuMont Labs., Allen B
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GE, Electronics Div.
General Radio
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Hewlett-Packard
Hickok Electcl. Instr.
Hycon Electronics
Indust. **Test** Equipt. Co.
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Jackson Electcl. Instr.
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Kellogg Switchboard
Krohn-Hite
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New London Instr. Co.
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Polytechnic Res. & Devel.
Precise Devel. Corp.
Precision Apparatus Co.
Premier Research
RCA Tube
Radio City Prods.
Ramo-Wooldridge
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Riverbank Labs
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Cubic Corp.
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Donner Scientific
DuMont Labs., Allen B
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Empire Devices, Inc
Farnsworth Electronics
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Feller Engrg. Co
General Communication
General Radio
Hamner Electronics
Hewlett-Packard
Hickok Electcl. Instr.
Hycon Electronics
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Interelectronics Corp.
Kay Electric
Kearfott (Western)
Lavoie Labs.
Magnetic Instr. Co.
Marconi Instruments
Measurements Corp.
Newark Electric Co.
New London Instr. Co
Northeast Scientific
Potter Instr. Co.
Precise Devel. Corp
Precision Apparatus Co
Radio Products Co
Ransom Research
Reiner Electronics Co
Rese Engrg., Inc.
Rutherford Electronics
Servo Corp. of America
Shasta Div.
Simpson Electric
Spencer-Kennedy Labs
Tektronix Inc.
Teletronics Lab.
Thordarson-Meissner
Triumph Mfg.
Walkirt Co.
Wang Labs., Inc.
Weinschel Engrg. Co.
Weston Instr.
Wollensak Optical

GENERATORS, Sweep Frequency, including AF, RF, UHF

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Authorized Mfgs. Serv
Avion Div.
BJ Electronics
Boonton Radio
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Brush Instruments
Canoga Corp.
Clegg Labs. Inc
Clough-Brengle
DuMont Labs., Allen B
Dymec, Inc.
Electric Indicator Co
Electronic Instr. Co.
El-Tronics, Inc.
F. R. Machine Works
Farnsworth Electronic
Fed. Telephone & Radio
Feller Engrg. Co.
General Communication
GE, Electronics Div
General Radio Co.
General Ultrasonics
Hewlett-Packard
Hickok Electcl. Instr. Co.
Hycon **Electronics**
Industrionics
Inst. Corp. of **Fla.**
Jackson Electcl. Instr.
Jerrold **Electronics**
Kay Electric
Kearfott (Western)
Krohn-Hite
Laboratory for Electronics
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Lindberg Engrg. Co.
Linear Equipt. Labs
Manson Labs.
Marconi Instruments
Maxson Instr. Div.
McKenna Labs.
Measurements Corp.
Mfrs. Engrg. & Equip
Menlo Park Engrg.
Newark Electric Co.
New London Instr. Co
Pacific Transducer Corp.
Panoramic Radio Products
Philco Corp
Polarad Electronics
Polytechnic Res. & **Devel.**
Precision Apparatus Co.
RCA Tube Div.
Radio City Prods.
Radioactive Products
Ramo-Wooldridge
Reiner Electronics
Servo Corp. of Amer.
Simpson Electric
Southw. Ind. Electronics
Superior, Inc.
Supreme, Inc.
Sylvania Elect. Prods.
Teletronics Lab.
Tel-Instr. Electronics
Telonic Industries
Thordarson-Meissner
Triplett Electcl. Instr. Co
United Optical
WacLine, Inc.

GENERATORS, Synchro

Amer. Electronics
Amer. Mach. & Foundry
Arma Div
Bendix, Eclipse-Pioneer
Bekey Elect. Co
Dalmotor Co.
Detroit Contls., Mil. Prods
Electric Indicator
Ford Instr. Co.
GE
Globe Industries
Helipot Div.
Henschel Corporation
Kearfott Co.
Kollsman Instr. Corp
Land-Air, Inc.
Lectronic Research Labs
Magnavox Co
Minneapolis Honeywell
  Boston Div.
Oster Mfg. Co., John
Radio City Products
Sangamo Electric
Siemon Engrg. Co
Small Motors Inc.
Sperry Gyroscope
Thordarson-Meissner
Western Gear Corp

GENERATORS, Ultrasonic, see Ultrasonic Equipment, also Transducers

GEOPHONES

Askania-Werke, A. G.
Atlantic Research
Brown Geophysical
Century Electronics & Insts
Chesapeake Instr. Corp
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Heiland Div.
Hoke, Inc.
Houston Technical Labs
Midwestern Instruments
Seismograph Service Corp.
Southw. Ind. Electronics
Texas Insts., Inc.
Varo Mfg. Co.

GEOPHYSICAL INSTRUMENTS, including Geophysical Shock Recorders, Gravity Indicators, Geophysical Prospecting Equipment (see also Radioactivity)

Aero Electronics
Airborne Instruments
Allied Products Div.
American Electronic Labs.
American Instr. Co.
Askania-Werke, A. G.
Associated Research
Atlantic Research
Atlas Exploration Co.
Benson-Lehner Corp.
Berkeley Div.
Biddle Co., Jas.
Brown Geophysical
Brush Instruments
Cambridge Instr. Co.
Century Electronics & Insts
Chesapeake Instr. Corp.
Consol. Electrodynamics
Daven Co.
Diatron Co.
Electro-Mechanical Development
Electro-Mechanical Res.
Electro-Techn. Labs.
Ferner Co.
Fisher Res. Lab.
Geophysical Instr. Div.
Georator Corp.
Geotechnical Corp.
Goldak Co.
Gurley, W & L. E.
Hamilton Watch
Hastings-Raydist
Hathaway Instr. Co.
Heiland Div.
Hewlett-Packard
Hickok Electcl. Instr. Co.
Hoke, Inc.
Instr. Devel. Labs.
Interelectronics Corp.
Jarrell-Ash
Kay Electric
Lucian Labs.
M B Mfg. Co.
Martin-Hubbard
Menlo Research Lab.
Metron Instr. Co.
Mico Instr. Co.
Midwestern Instruments
Minneapolis-Honeywell, Boston Div.
Mt. Soprts Instr. Co.
National Co., Inc.
Nuclear Research Corp.
Penn Optical & Instr.
Potter Instr. Co.
Precision Radiation
Radiation Counter Labs.
Ruska Instr. Corp.
Seismograph Service Corp.
Sensitive Research Instr.
Southw. Ind. Electronics
Sprengnether Instr. Co.
Stratex Instr. Co.
Suverkrop Instr. Co.
Techno Instr. Co.
Televiso Co.
Texas Insts., Inc.
Texas Div., Brush
Trimount Instr. Co.
United Engineers
U. S. Instr. Corp.
Universal Transistor
Varian Assocs.
Western Geophysical

GERMANIUM DIODES, see Diodes, Germanium

GERMANIUM RECTIFIERS, see Rectifiers, Dry Disc

GILLMORE NEEDLES, see Needles, Gillmore

GLARE METERS, see Gloss Meters

GLASS APPARATUS and PARTS, Special, see Laboratory Apparatus

GLASS BLOWING and GLASS BURNERS, see Glass Working Equipment

Bush Assocs.
Croname, Inc.
Crystal Glass Tube & Cyl.
Fisher Scientific
Glass Engrg. Labs.
Glass Insts., Inc.
Griebel Co.
Greiner Co., Emil
Greiner Glassblowing Lab.
Haydu Brothers
Kahle Engrg. Co.
Kontes Glass
Litton Industries
Nester Co.
Phoenix Prec. Instr.
Prec. Glass Prods.
Radiation Counter Labs.
Res. Specialties Co.
Scientific Instr. Co.
Teichert Engrg. Co.
Torrance Glass & Color
Uhrig Co., Joseph F.
Wakefield Industries
Zenith Optical Co.

GLASS, Circles and Ovals for Instruments

Apex Optical Corp.
Bache & Company, Semon
Behm Sons & Co., George
Brazilian Trading Co.
Bristol Co.
Bronoptics Co.
Buhl Optical
Can. Rad. & Uran. Corp.
Cast Optics
Chicago Dial Co.
Corning Glass Works
Croname, Inc.
Crystal Glass Tube & Cyl
Davidson Mfg.
Dearborn Glass Co.
Dearborn Scientific
Eclipse Glass Co.
Edna Lite Co.
Engis Equipt. Co.
Esco Prods. Co.
Farrand Optical
Ferner Co.
Fish-Schurman
Freed, J. Melvin
G. R. S. Corp.
Geophysical Instr. Co.
Glass Insts., Inc.
Glass Products Co.
Glass Specialty
Glendale Optical
Goerz Amer. Optical
Greiner Glassblowing Lab.
Gurley, W. & L. E.
Harrison & Harrison
Hayward Scient. Glass
Horning, August W.
Inlaid Optical
International Optical
Johnston Glass Co.
Jones Optical Works
Lab. Optical Co.
Lancaster Glass
Leroy Clausing Co.
Lynn, Robert M.
Marsco Mfg.
Merry Instr. Co.
Meyer Opticraft
New Haven Clock
Northrop Anaheim
Pacific Univ. Prods.
Palos Optical
Pancro Mirrors, Inc.
Pan-technics, Ltd.
Phoenix Prec. Instr.
Photoplating Co.
Plummer & Kershaw
Polaroid Co.
Practo Photo Acces.
Prec. Glass Prods.
Prec. Prods. Co.
Regal Instr. Co.
Schneider-Cogswell
Scientific Instr. Co.
Simpson Optical
Steel Co., Herman
Technical Soldering Co.
Tiffen Marketing
Torrance Glass & Color
Unertl Optical Co.
United Lens Co.
Valley-National Corp.
Zenith Optical Co.
Zenith Optical Lab.

GLASS, Colored, for Filters

Alpha Amer. Corp.
Aristo Grid Lamp Prods.
Bache & Company, Semon
Bausch & Lomb Optical
Behm & Sons
Brazilian Trading Co.
Bronoptics Co.
Buhl Optical
Cast Optics
Corning Glass Works
Dearborn Glass Co.
Edna Lite Co.
Enteco Industries, Inc.
Esco Prods. Co.
Fish-Schurman
Freed, J. Melvin
Glass Insts., Inc.
Glass Specialty
Glendale Optical
Gordon Enterprises
Hayward Scientific
Inlaid Optical
Internat. Optical
Jaegers, A.
Lab. Optical Co.
Lancaster Glass
Leroy Clausing Co.
Lynn, Robert M.
Marsco Mfg. Co.
Pacific Univ. Prods.
Palos Optical
Pancro Mirrors, Inc.
Phoenix Prec. Instr.
Polaroid Corp.
Practo Photo Acces
Prec. Glass Prods.
Prec. Prods. Co.
Regal Instr. Co.
Scientific Instr. Co.
Simpson Optical
Tiffen Marketing
Tinsley Labs.
Torrance Glass & Color
Valley National Corp.
Zenith Optical Lab.

GLASS ETCHING and FROSTING SOLUTION

Bache & Company, Semon
Behm & Sons
Benjamin & Assoc., L.
Dearborn Glass Co.
Edna Lite Co.
Ednal Co.
General Chemical Div.
Harshaw Chemical Co.
Industrial R. & T. Labs
Marsco Mfg. Co.
Teichert Engrg. Co.
Torrance Glass & Color
Westinghouse Electric

GLASS, Heat Absorbing and Heat Tempered

Alfa Amer. Corp.
Amer. Optical
Bache & Company, Semon
Bausch & Lomb
Behm & Sons
Bronoptics Co.
Buhl Optical Co.
Chicago Dial Co.
Corning Glass Works
Crystal Glass Tube
Dearborn Glass Co.
Eastman Kodak Co.
Eclipse Glass Co.
Edna Lite Co.
Esco Products
Fish-Schurman
Fisher & Porter Co.
General Scientific
Glass Specialty
Greiner Glassblowing Lab
Haward Scientific
Herron Optical
International Optical
Jaegers, A.
Kimble Glass Co.
Lancaster Glass
Lynn, Robert M.
Marsco Mfg. Co.
Palos Optical
Practo Photo Acces. Corp.
Regal Instr. Co.
Rogers and Clarke
Schneider-Cogswell, Inc.
Scientific Instr. Co.
Simpson Optical
Tiffen Marketing
Torrance Glass & Color
United Lens Co.
Universal Blank Corp.
Zenith Optical Co.

GLASS, Infrared Transmitting

Alfa Amer. Corp.
Amer. Optical Co.
Bache & Company, Semon
Bausch & Lomb
Behm & Sons
Bronoptics Co.
Cast Optics
Corning Glass Works
Dearborn Glass Co.
Eastman Kodak Co.
Edna Lite Co.
Enteco Industries, Inc.
Esco Products
Farrand Optical
Fish-Schurman
Glass Specialty
Harshaw Chemical
Hayward Scientific
Houston Technical Labs.
International Optical
Lab. Optical Co.
Lancaster Glass
Lynn, Robert M.
Marsco Mfg. Co.
Meyer Opticraft
Phoenix Prec. Instr.
Polaroid Corp.
Practo Photo Access. Corp.
Regal Instr. Co.
Rohm & Haas
Servo Corp. of Amer.
Simpson Optical
Texas Instr., Inc.
Tiffen Marketing
Torrance Glass & Color
Zenith Optical Lab.

GLASS, Low Reflecting Surfaces

Amer. Optical Co.
Bache & Company, Semon
Bausch & Lomb
Behm & Sons
Boehmke Optical
Bronoptics Co.
Buhl Optical
Burke & James
Can. Rad. & Uran. Co.
Chicago Dial Co.
Corning Glass Wks.
Crystal Research Labs.
Dearborn Glass Co.
Dearborn Scientific
Distillation Products
Dome Precision Corp.
Eclipse Glass Co.
Edmund Scientific
Edna Lite Co.
Esco Products
Fish-Schurman
Fischer & Porter Co.
Gaertner Scientific
General Scientific
Green Rectifier Co.
Gurley, W. & L. E.
International Devel. Co.
International Optical
Jaegers, A.
Keim Prec. Mirrors
Lancaster Glass
Leroy Clausing Co.
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Miller Instr. Co.
National Research Corp.
Northrop Anaheim
Optical Coating Lab.
Optical Film Engrg. Co.
Pacific Optical
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Palos Optical
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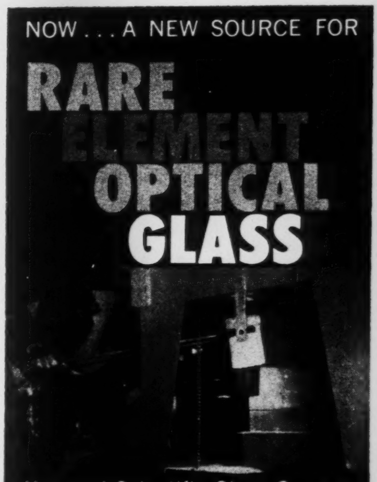
Phoenix Prec. Instr.
Plummer & Kershaw



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GLASS, Photosensitive

Bache & Co., Semon
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Bush Assocs.
Corning Glass Works
Fish-Schurman
H. & O. Co
Internat. Glass Corp
Precision Products
Regal Instr. Co.

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Bache & Company, Semon
Bausch & Lomb
Bronoptics Co.
Buhl Optical
Can. Rad. & Uran.
Chicago Dial Co.
Corning Glass Works
Eastman Kodak Co
Edna Lite Co.
Esco Products
Fish-Schurman
Gordan Co., Claud S.
Haydu Brothers
Hayward Scientific
Inlaid Optical Corp
Jaegers, A.
Lynn, Robert M.
Marsco Mfg. Co.
Monogram Mfg.
Nikon, Inc.
Palos Optical
Regal Instr. Co
Swift & Anderson, Inc
Torrance Glass & Color
United Lens Co.
Universal Blank Corp
Zenith Optical Lab.
Zoomar Corp.

GLASS, Shatterproof for Instruments

Bache & Company, Semon
Behm & Sons
Bristol Co.
Bronoptics Co.
Buhl Optical
Cast Optics
Chicago Dial Co.
Dearborn Glass Co
Edna Lite Co.
Ednal Co.
Fischer & Porter
Fish-Schurman
Glass Specialty
Hornig, August W
Inlaid Optical
Marsco Mfg. Co
New Haven Clock
Regal Instr. Co.
Rohm & Haas
Tiffen Marketing
Valley National Co
Zenith Optical Lab

GLASS TEST INSTRUMENTS, including Hardness, Immersion Liquids, Refraction, Strain, etc. (see also Refractometers)

Amer. Optical Co.
Baird-Atomic
Bausch & Lomb
Cargille, R. P
Chapman Labs.
Edin Electronics
Epic, Inc.
Ercona Corp.
Fecker, Inc.
Fish-Schurman
Gaertner Scientific
GE
Hathaway Instr. Co
Instrumentation Assoc
Instrument Devel. Labs
Kollmorgen Optical
Magnaflux Corp.
Meyer Opticraft
Minneapolis-Honeywell, Boston Div.
Microchemical Service
Northrop Anaheim
Olsen Testing Mach
Penn Optical & Instr
Pfaltz & Bauer
Phoenix Prec. Instr
Plummer & Kershaw
Prec. Glass Prods
Polarizing Instr. Co
Precision Scientific
QOS Corp.
Robertshaw-Fulton
Rudolph & Sons
Shasta Div.
Sheffield Corp
Taber Inst. Corp.
Teichert Engrg. Co
Testing Machines, Inc
Thwing-Albert
Zeiss, Inc., Carl

GLASS TO METAL SEALS, see Terminals, Hermetic

GLASS TUBING, Heat Resisting

Ace Glass
Bache & Company, Semon
Brand and Co.,
Bush Assocs.
Corning Glass Works
Crystal Glass Tube & Cyl.
Greiner Glassblowing Lab
Fischer & Porter Co
Fish-Schurman
Friedrich & Dimmock
Greiner Glassblowing Lab
Helio Instr. Co.
Jacoby-Tarbox
Jerguson Gage
Kimble Glass Co
Kontes Glass
Owens-Illinois Glass
Phoenix Prec. Instr.
Porter, George K
Sentinel Glass Co
Smith Co., Arthur F
Thermal American Fused
Thermal Syndicates, Ltd
Trimount Instr. Co.
Uehling Instr. Co
Uhrig Co., Joseph F.
Wilmad Glass Co.

GLASS TUBING, Precision Bore

Ace Glass Inc
Alfa Photo Corp
Aristo Grid Lamp Prods
Bache & Company, Semon
Brooks Rotameter
Corning Glass Works
Crystal Glass Tube & Cyl.
Dunbar Glass Corp
Edna Lite Co.
Eisele & Co.
Everett Products
Fischer & Porter Co
Fish-Schurman
Fredericks Co., Geo
GE, Lamp Dept.
Greiner Glassblowing Lab
Gurley, W. & L. E
Harshaw Chemical
Ideal-Aerosmith
Kontes Glass
Mercury Glass Co.
Owens-Illinois
Pan-technics, Ltd.
Phoenix Prec. Instr.
Porter, George K.
Prec. Glass Prods.
Radiation Counter Labs.
Sampson Chem.
Scientific Glass App.
Sentinel Glass Co.
Smith Co., Arthur F.
Stupakoff Div.
Teichert Engrg. Co
Torrance Glass & Color
Wilmad Glass Co.

GLASS TUBING, Ultraviolet Transmitting, including Opaque to Visible Lighting

Alfa Amer. Corp.
Bache & Company, Semon
Continental Electric
Cooper-Hewitt
Corning Glass Works
Esco Products
Fish-Schurman
Gates & Co.
GE
Greiner Glassblowing Lab
Hanovia Chem. & Mfg.
Helio Instr. Co.
Penberthy Injector
Phoenix Prec. Instr.
Prec. Glass Prods.
Quartz Products Corp.
Sampson Chem. & Pigment
Thermal American Fused
Thermal Syndicates, Ltd.
Ultra-Violet Products
Wilmad Glass Co.

GLASS WORKING EQUIPMENT including Blowing, Cutting, etc.

Ace Glass Inc.
Alpha American Corp.
Amer. Gas Furnace Co.
Baltimore Instr.
Bethlehem App. Co.
Bush Assocs.
Croname, Inc.
Crystal Glass Tube & Cyl.
Ferguson Co.
Fisher Scientific
Glass Engrg. Labs.
Glass Insts., Inc.
Griebel Co.
Greiner Co. Emil
Greiner Glassblowing Lab.
Haydu Brothers
Instrumentation Assoc.
Kahle Engrg. Co.
Laboratory Optical
Litton Industries
Nester Co.
Phoenix Prec. Instr.
Precision Diamond Tool
Precision Glass Prods.
Radiation Counter Labs.
Res. Specialties Co.
Scientific Instr. Co.
Teichert Engrg. Co.
Torrance Glass
Uhrig Co., Joseph F.
Wakefield Industries
Will Corp.
Zenith Optical Co

GLASSES, Cover

Amer. Optical Co
Apex Optical Corp.
Apex Specialties
Bache & Company, Semon
Bausch & Lomb Optical
Behm & Sons
Buhl Optical Co.
Bushnell Co.
Cast Optics Corp
Chicago Dial Co.
Corning Glass Works
Dearborn Glass Co
Dearborn Scientific Co
Eclipse Glass Co.
Edna Lite Co.
Esco Products
Fish-Schurman
Freed, J. Melvin
Gallien, R. P.
Glass Specialty
Grat-Apsco
Greiner Co., Emil
Harrison & Harrison
Harshaw Chemical Co
Inlaid Optical Corp
Jones Optical Works
Kimble Glass Co
Koehler Instr. Co.
Lancaster Glass
Lynn, Robert M
Marsco Mfg. Co.
Master Optical Co
Optics Mfg. Corp
Plummer & Kershaw
Polan Industries
Popper & Klein
Precision Products
Regal Instr. Co.
Republic Lens
Rohm & Haas
Royal Master, Inc
Simpson Optical Co
Technical Soldering Co
Tiffen Marketing Co.
Valley Mfg. Co.
Zenith Optical Lab.

GLASSWARE, Laboratory see Laboratory Apparatus

GLOSS METERS (see also Paint Test Instruments)

Amer. Instr. Co
Bausch & Lomb
Central Scientific
Dearborn Scientific
Epic, Inc
Ercona Corp
Gaertner Scientific
Gardner Laboratory
Instrument Devel. Labs
Leitz Inc.
Pfaltz & Bauer
Photovolt Corp.
Sensitive Res. Instr
Testing Machines, Inc
Zeiss, Inc., Carl

GLOW TUBES, Voltage Regulators, see Voltage Regulators

GLUE TESTERS, see Adhesion

GOLD

Amer. Platinum Works
Amer. Silver Co.
Baker & Co.
Bishop & Co., J.
Brainin Co., C. S.
Cohn Corp., Sigmund
Gallien, R. P
General Alloy Co., Inc
General Plate Div.
Handy & Harman
Mallory & Co., P. R
Ney Co., J. M
Pancro Mirrors, Inc.
Peerless Roll Leaf Co.
Secon Metals Corp.
Sel-Rex Corp.
Sherman & Co
Technic, Inc
Wilson Co., H. A

GOLD BEATER'S SKIN

Hastings & Co.

GONIOMETERS

Amer. Inst. Co
Autom. Timing & Controls
Bendix Aviation Corp
Berkeley Div.
Brinkmann Instruments
Dearborn Scientific
Dusenbery Co.
Eichner Instruments
Ercona Corp.
Ferner Co.
Fish-Schurman
Gaertner Scientific
Gardner Laboratory
GE X-Ray Corp.
Griswold Mfg. Co
Hayes Scient. App.
Lab. Optical
Jarrell-Ash
Meyer Opticraft
Nilsen Mfg. Co.
North Amer. Philips
Oppiem Co., Inc.
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Servo Corp. of Amer.
Stocker & Yale
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Testing Machines, Inc
Wild Heerbrugg
Zeiss, Inc., Carl

GOVERNORS, see Object of Control

GOVERNORS, Air, see pressure Regulators, Air

GOVERNORS, District, see Gas Distribution System Instruments

GOVERNORS, Engine, see Engine Governors

GOVERNORS, Escapement Controlled, see Clockworks

GOVERNORS, Gas, see Gas Distribution System Instruments, also Pressure Controllers

GOVERNORS, Pump, see Pump Governors

GOVERNORS, Station, see Electric Power Generation Instruments

GOVERNORS, Steam, see Engine Governors

GOVERNORS, Turbine, see Engine Governors

GRADUATING MACHINES, see Dividing Machines

GRAIN TEST INSTRUMENTS

Barbender Instrs.
Burrows Equipt.
Cal-Ohm Labs.
Central Scientific
Cuthbert Co.
Exact Weight Scale
Grain Lab. Equipt. Co.
Menlo Research Lab.
Moist-O-Meter, Inc.
Moisture Register Co.
Newark Scale Works
Precision Scientific
Schlumberger Well
Scient. Inst. Dev. Lab.
Seedburo Equipt Co.
Tell-Tronics Prod., Inc
Toledo Scale Co.
Troemner, Henry
Weston Instr.

GRANULAR MATERIALS Level, see Level

GRANULAR MATERIALS MEASUREMENTS, see Particle Instruments

GRANULAR MATERIALS FLOW, see Flow Instruments, Granular Material

GRAPHIC CIRCUITS, see Circuits, Graphic

GRAPHIC PANELS, see Panels, Graphic

GRAPHITE, Colloidal

Acheson Colloids
Dow Chemical
Newall Mfg. Co.

GRATING, Diffraction

Applied Research Labs.
Baird-Atomic
Bausch & Lomb
Central Scientific
Coleman Instruments
Davidson Mfg.
Dearborn Scientific
Dietert Co.
Diffraction Prods.
Farrand Optical
Fish-Schurman
Gaertner Scientific
G. M. Mfg. Co.
Gurley, W. & L. E.
Hello Instr. Co.
Jarrell-Ash
Laboratory Specialties
Perkin-Elmer
Unertl Optical
Welch Mfg. Co., W. M.

GRATING, Echelon

Baird-Atomic
Bausch & Lomb
Farrand Optical
Fish-Schurman
Gaertner-Scientific
Helio Instr. Co
Jarrell-Ash Co.
Lab. Optical
Palos Optical

GRAVIMETERS, see Geophysical Instruments

GRAVITOMETERS, see Specific Gravity

GRAVITY, see Geophysical or Specific Gravity

GREASE TESTING INSTRUMENTS

Alpha Corp.
Alpha Molykote
Amer. Instr. Co
American Res. Corp.
Apex Scient.
Barbender Instrs.
Burrell Corp.
Central Scientific
Devtronics, Inc.
Engineering Res. & Devel
Erdco Engrg. Co.
Fish-Schurman Co.
Fisher Scientific Co.
GE
Greiner, Emil
Humboldt Mfg. Co.
Koehler Instr. Co.
Labline Inc.
LaPine Corp.
Precision Scientific Co
Technical Equipt. Co.
Televiso Co.
Weston Instr.

GRINDERS, Contour, see Machines, Contour Grinding

GRINDERS, Precision Surface, see Machines, Surface Grinding

GRINDING FINISH GAGES, see Dimensional Gages

GROUND DETECTORS (see also Resistance)

Assoc. Research, Inc.
Automatic Electric
Biddle Co., James G.
Borden Engrg. Div.
Dit-Mco, Inc.
Eastern Specialty
Electro-Tech Equip.
Esterline-Angus
Excel Elect. Service Co
GE, Apparatus Sales
Georator Corp.
Gray Instr. Co.
Heiland Div.
Industrial Insts., Inc.
Instrument Labs.
Kahn & Co.
Leeds & Northrup
Miller, M. C.
Minneapolis-Honeywell, Boston Div.
Nelson Electric Mfg.
Niagara Electric
Parr Mfg. Corp.
Penn Optical & Instr.
Peschel Electronics
Roller-Smith
Sensitive Res. Instr.
Shallcross Mfg.
Sherron Metallic
Sticht & Co., Herman H
Sunshine Scientific
Thwing-Albert
United Optical
Westinghouse Electric
Wheelock Signals, Inc
Winslow Co.
Zenith Electric

GROUND RESISTANCE INSTRUMENTS, see Resistance, Ground

GUIDES, Sapphire Filament Coiling

Bird & Co.
Elgin National Watch
Gatti, Aurele M.
Industrial Jewel Brg.
Kastner, Charles
Keller & Co.
Linde Co.
Powers, George
Steel Co.
Swiss Amer. Jewel Bear
Swiss Jewel Co.
Vallorbs Jewel Co
Waltham Precision Tool
Worley Jewel Co.

GUIDES, Wire and Thread

Bird & Co.
Centralab Div.
Corning Glass Works
Crafts Co.
Dusenberry Co.
Elgin National Watch
Gatti, Inc., M.
GE Metall. Prods. Dept.
Keller & Co.
Steatite Div.
Stupakoff Div.
Superior Steatite Div.
Tinnerman Products
Vallorbs Jewel Co.
Worley Jewel Co.

GUMMED TAPE TESTING MACHINES, see Paper Testing Machines

GYRO COMPASSES, see Compasses, Gyro

GYRO PILOT, see Aircraft Instruments

GYRO STABILIZERS

Arma Div.
Avion Div.
Bendix, Eclipse-Pioneer
Cedar Engrg., Inc.
Daystrom Instrument
Daystrom-Pacific
Detroit Contls., Mil. Prod.
Ford Instr. Co.
GE
Giannini & Co.
Globe Industries
Gyromechanisms, Inc.
Humphrey, Inc.
Hycon Electronics
Kearfott Co.
Lear, Inc.
Maxson Corp., W. L.
Minneapolis-Honeywell, Boston Div.
Norden-Ketay
Pacific Scientific
Rea Company
Reeves Instr. Co
Sterling Prec., Inst. Div
Summers Gyroscope

GYROS and GYROSCOPES, Vertical and Directional Rate

Amer. Electronic Mfg.
Arma Div
Autonetics Div.
Avion Div.
Bendix, Eclipse-Pioneer
Cedar Engrg., Inc.
Control Engrg. Co
Daystrom-Pacific
Detroit Contls., Mil. Prod.
Engineering Res. Assocs
Epic Inc.
Fairchild Controls Corp.
Federal Products
Ford Instr. Co.
GE, Apparatus Sales
Giannini, Co.
Globe Industries, Inc
Greenleaf Mfg.
Gyromechanisms, Inc
Gyroscopes, Inc.
Humboldt Mfg. Co
Humphrey, Inc.
Hycon Electronics
Impact Register Co
Instrument Assocs.
Instrument Devel. Labs
Iron Fireman Electronics
Kearfott Co., Western Div
Kearfott Co., Inc
Lear Inc
Maxson Corp
Minneapolis-Honeywell, Boston Div
Norden-Ketay
Pacific Scientific
Reeves Instr. Corp
Sanders Associates
Sperry Gyroscope
Sterling Prec. Instr
Summers Gyroscope
Ten Bosch Inc.
U. S. Time Corp.
Vectron, Inc.
Whittaker Gyro Div

HAIRSPRINGS, see Springs

HANDLES, Instrument

Ace Plastic Co.
Aerolite Electronics
Allen, Chas. I.
Amer. Hard Rubber Co
Bud Radio, Inc.
Cambridge Thermionic
Chicago Molded Prods.
Consolidated Mld. Prods
Dimco-Gray
Dixon, Inc.
Erie Resistor
Erwood, Inc.
GE, Plastics Dept.
Goe Engrg. Co
Gordon Co., Claud S.
Grammes Co.
Grigoleit Co
Grobet File Co
Imperial Molded Prods.
Insuline Corp.
Lewyt Metal Prods.
Luzerne Rubber Co.
Millen Mfg. Co
Miller Mfg. Co.
Modern Tech. Supply
Molded Insulation Co
National Co.
Radio Frequency Labs.
Raytheon Mfg. Co
Richardson Co.
Rogan Bros.
Scheidl Mfg. Co.
Strombeck-Becker Co
U. S. Engineering Co
Virginia Electronics
Waterbury Mfg. Co.
Watertown Mfg. Co.

HARDNESS INDICATORS for Plastic Films, see Plastic Test Instruments

HARDNESS PENETRATORS, Diamond

Amer. Optical
Clark Instrument
Crafts Co.
Dessau, Maurice S.
Eitzen Co., Louis C.
Ercona Corp.
Ferner Co., R. Y.
Gatti, Aurele M.
Gilmore & Co
Gordon Co., Claud S
Hirschmann Co., Carl
Kent Cliff Labs. Div.
Opplem Co.
Powers, George
Precision Diamond Tool
Service Diamond Tool
Sheffield Corp.
Shore Instr. & Mfg. Co.
Testing Machines, Inc.
Torsion Balance Co.
Willey's Carbide Tool
Wilson Mech. Instr. Div.

HARDNESS TESTING MACHINES, Including Brinell

American Optical
Ames Precision Mach.
Ann Arbor Instr. Wks
Arlin Products, Inc.
Barber-Colman
Baldwin-Lima-Hamilton
Barbender Instrs.
Bush Assocs.
Clark Instr. Inc.
ConRay Corp.
Design & Develp. Labs.
Detroit Testing Mach.
Dice Co.
Dietert Co.
DoAll Co.
Eberbach & Son
Eitzen Co. Louis C.
Ferner Co.
Fisher Scientific
Gardner Lab.
GE
Gordon Co., Claud S
Gordon Enterprises
Hacker & Co.
Hirschmann Co., Carl
Hygrotester, Inc.
Kent Cliff Labs.
King Tester Corp
Koehler Instr. Co
Leitz, Inc.
Magnaflux Corp
Magnetic Analysis Corp
Mast Devel.
Metrol Inc.
Miller Instruments
Newage Industries
Olsen Testing Machine
Opplem Co.
Opto-Metric Tools
Pacific Scientific
Pacific Transducer Corp.
Pittsburgh Instr. & Mach.
Precise Prods. Co.
Precision Scientific
Reiner Electronics
Riehle Div.
Rowe Engrg. Co.
Rubicon Co
Scherr Co.
Service Diamond Tool
Sheffield Corp.
Shore Instr. & Mfg. Co.
Steel City Testing Machs
Swedish Gage
Taber Instr. Co
Tennant Sons & Co.
Testing Machines, Inc
Topflight Tape Co.
Torsion Balance Co.
Webster Instr. Inc.
Wilson Mech. Instr
Zeiss, Inc., Carl

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Aerolite Electronics
Aircraft Radio Corp
Ampco Mfg. Co.
Apex Optical
Black & Decker
Bud Radio
Cambridge Thermionic
Cirron Component
Churchill Lighting
Colortone Electronics
Corbin Cabinet Lock Co
Dahl Co.
Dimco-Gray
Dixon Inc.
DuMont Labs., Allen
Dresser Products
Eby, Inc., Hugh H.
Engineered Prods.
Erwood, Inc.
Farnsworth Electronics
Federal Screw Prods.
Ferner Co.
Gadgets, Inc.
General Cement Mfg.
Genisco Inc.
Goe Engrg.
Grammes Co.
Grigoleit Co.
Hartford Mach. Screw
Hopkins Engrg.
Instr. Components
Johnson Co., E. F.
Laboratory Equipt. Co
Lerco Electronics
Lessellis & Assocs.
Lewyt Metal Prods
Malco Tool & Mfg.
Mallory Co., P. R.
Millen Mfg. Co.
Miller-Robinson
Modern Tech. Supply
Mueller Electric
National Co.
Newark Electric Co.
Newall Mfg. Co.
Ostby & Barton
Palnut Co.
Panduit Co
Remington-Rand Univac
Remler Co.
Rogan Co.
Sangamo Electric
Scheidl Mfg. Co.
Scoville Mfg. Co.
Smith, Inc., Herman H.
Sphinx American Co.
Stanley Wks.
Sterling Prec. Corp.
Stimpson Co.
Stromberg-Carlson
Stronghold Screw Prods
Swishomatic Prods.
Telecomputing Corp.
Times Facsimile Corp.
Torrington Co.
Ultrasonic Corp.
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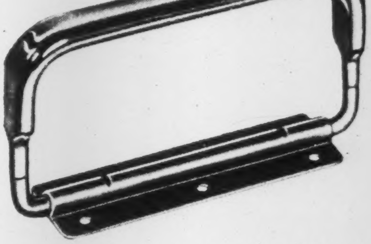

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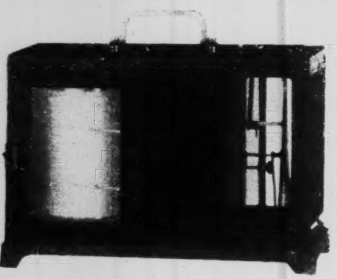

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Kellogg Switchboard
LR Electronics
Newark Electric Co.
North Electric
Pax Electronics
Remler Co.
Shure Brothers, Inc
Superex Electronics
Stromberg-Carlson
Tech. Material Corp
Telex, Inc.
U. S. Instr. Corp.
Winslow Co., Inc.

HEADS, Rupture, see Pressure Relief

HEADS, Recording, see Recording Heads

HEAT FLOW, instruments and Transducers

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Bristol Co.
Eastern Precision Resistor
Hagan Chem. & Controls
National Instr. Labs.
Research, Inc.
Robertson & Ruth
Ruge Assocs.
United Mfg. Co. Div
Victory Engrg. Corp.

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Blue M Electric
Clarostat Mfg. Co.
Cleveland Process Co
Continental Sensing
Corning Glass Works
Cutler-Hammer
Electric Hotpack
Electro-Flex Heat
Electro-Tech Equip.
Elsin Electronics
GE. Apparatus Sales
Gordon Co., Claud S.
Hevi-Duty Electric
Hexacon Electric
Huppert Co.
Kanthal Corp.
Mech. Indust. Prods.
Modern Lab. Equip. Co
Morganite, Inc.
Nelson Electric Mfg.
Precision Scientific
Pyro-Electric
Research, Inc.
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States Co
Still-Man Equipt. Corp.
Syntron Company
Temp. Engrg. Corp.
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Torrington Co.
Tranter Mfg.
Tuttle & Kift, Inc.
Ulanet Co.
Ungar Elect. Tools, Inc.
Wabash Metal Prod.
Watlow Elect. Mfg.
Wiegand Co.

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Electric Hotpack
Electro-Flex Heat
LaPine & Co.
Lewis Engrg. Co.
Research, Inc.
Rockbestos Prods. Corp.
Wiegand Co.

HEATING ELEMENTS, Furnace

Blue M Electric Co.
Cleveland Process Co
Continental Sensing
Electric Hotpack Co.
Electro-Tech Equip.
Fansteel Metallurgical
GE, Apparatus Sales
Hevi-Duty Electric
Huppert Co.
Kanthal Corp.
Leeds & Northrup
Lucifer Furnaces
Research, Inc.
Research Appliance Co.
Unertl Optical Co., John
Temp. Engrg. Corp.
Thermel, Inc.
Tuttle & Kift, Inc.
Wiegand Co.

HELIOSTATS

Fecker, Inc. J. W.
Gaertner Scientific
Instruments Corp.
Palos Optical
Unertl Optical

HERMETIC SEALS, see Terminals, Hermetic

HERMETIC SEALS, including Connectors, Headers, and Terminals

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Amer. Lava Corp.
Amphenol Electronics
Anton Electronic Labs.
Ceramaseal Co.
Cermatronics, Inc.
Constantin & Co., L. L.
Cooper-Hewitt Elec
Corning Glass Works
Deutsch Co
Electrical Industries
Fedl. Telephone & Radio
GE Apparatus Sales
General Ceramics
Gen. Hermetic Sealing
Glass-Tite Indust.
Hermaseal Co.
Holex, Inc.
Interni. Resistance
Kearfott Co
Richfield Coined Prodts.
Seals, Ltd.
Sealtron Corp.
Steatite Div. Amer. Lava
Stupakoff Div.
Technical Soldering
Thermo Materials
Torwico Electronics
U. S. Components
U. S. Gasket Co.
U. S. Stoneware
Vacuum Tube Prods.
Winchester Electronics

HIGH ALTITUDE TEST and CALIBRATION CHAMBERS, see Environmental Test Chambers

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Airborne Instruments
Allis-Chalmers
Amer. Electroneering
Amer. Electronic Labs.
Bendix Aviation Corp.
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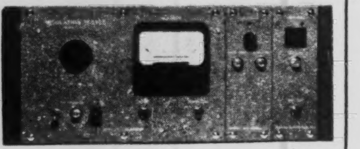

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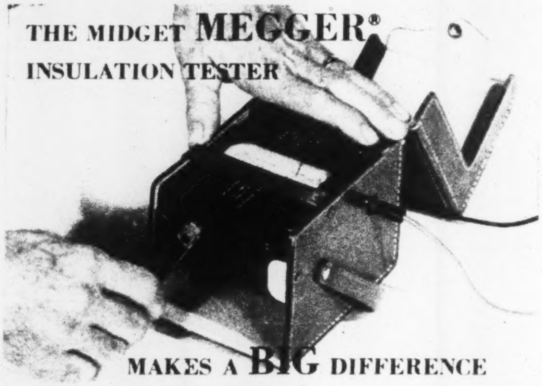
Amer. Rec. Chart Co.
B-I-F Industries
Baird-Atomic
Bristol Co.
Brush Instruments
Chart Production Co.
Crown Indust. Prods.
Defender Instr. & Reg
Edin Co.
Esterline-Angus
Fawler-Brost
Foxboro Co.
GE, Apparatus Sales
Gordon Co., Claud S.
Hays Corp.
Instruments Corp.
Lawter Chemicals
Leeds & Northrup
Manning, Maxwell & Moore
Minneapolis-Honeywell,
  Indust. Div.
Moeller Instr. Co.
Nichols, Lyman
Phipps & Bird
Sanford, Inc.
Sound Apparatus Co.
Taylor Instr. Cos.
Technical Charts, Inc.
Thwing-Albert
Trerice Co.
Universal Match
Varian Assocs.
Weksler Instruments
West Instr. Corp.
Westinghouse Electric
Weston Inst.

INSPECTION, Glass and Quartz, see Glass Test



. . . IN MAINTENANCE PROBLEMS

The operating span of electrical equipment can be shortened considerably by accumulations of *dirt* and *moisture*.

Only by periodic insulation resistance measurements can you be sure of the condition of electrical insulation in your machines. Test with a dependable Megger Insulation Tester and keep records of each piece of equipment.

For Convenience and Protection, use the MIDGET "MEGGER" INSULATION TESTER. Write for **BULLETIN 21-85-I.**

B617

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Electrical & Scientific Instruments

1316 ARCH STREET, PHILADELPHIA 7, PA.

For more information circle **152** on inquiry card.

INSPECTION DEVICES, Color, see Color

INSPECTION DEVICES, Dimensional (including Concentricity, Cylindricality, Diameter, Thickness, etc.) see Dimensional Gages

INSPECTION DEVICES, Electrical, see Circuit Testers, also Insulation Testers, also Resistance Indicators, etc.

INSPECTION DEVICES, Hardness, see Hardness Testers

INSPECTION DEVICES, Insulated Wire, see Insulation Testers

INSPECTION DEVICES, Optical Projection, see Dimensional Gages

INSPECTION DEVICES, Smoothness, see Dimensional Gages, Surface

INSPECTION DEVICES, Thickness, see Dimensional Gages, also Thickness Gages

INSPECTION EQUIPMENT, Welding, see Flaw Detectors

INSPECTION EQUIPMENT, Bore Hole, see Telescopes, Bore Inspection

INSPECTION EQUIPMENT, Nondestructive, see Flaw Detectors

INSPECTORS, MAGNETIC, see Flaw Detectors, Magnetic

INSTRUMENT CASES, see Cases

INSTRUMENT CLEANING MACHINES, see Cleaning Machines

INSTRUMENT COVERS, see Covers, also Cases

INSTRUMENT FUSES, see Fuses

INSTRUMENT HOUSINGS, see Panels

INSTRUMENT LUBRICANTS, see Lubricants

INSTRUMENT PACKAGING, see Cases

INSTRUMENT PIVOTS and BEARINGS, see Pivots

INSTRUMENT REPAIRING TOOLS, see Tools

INSTRUMENT TRANSFORMERS, see Transformers

INSTRUMENT TUBING and FITTINGS, see Tubing and Fittings

INSTRUMENT TUBING SUPPORTS, see Tubing Supports

INSULATION, Electrical

Acme Wire
Amer. Phenolic Corp.
Armstrong Cork
Auburn Mfg. Co.
Bakelite Div.
Baltor Industries
Bentley, Harris Mfg.
Biggs Co.
Brady Co., W. H.
Brand and Co.
Buchanan Elec. Prods.
Cast Optics
Continental-Diamond Fibre
Corning Glass Works
Dolph, John C.
Dow Corning
Du-Co Ceramics
Du Pont de Nemours
Durez Plastics & Chem.
Dynakon Corp.
Electro-Tech Products
Electronic Mechanics, Inc.
Emerson & Cuming
Federal Screw Prods.
Formica Co.
GE
Gordon Co., Claud S.
Hermetic Sealed Prods.
Insulation Mfrs. Corp.
Lapp Insulator
Mica Insulator
Microcircuits Co.
Minnesota Mining & Mfg.
Mycalex Corp. of Amer.
Natl. Varnished Prods.
Natl. Vulcanized Fibre
Polymer Corp.
Precision-Paper Tube
Resinite Dep., Borden Co.
Rex Corp.
Richardson Co.
Rogan Bros.
Sandee Mfg. Co.
Sauereisen Cement
Sequoia Wire
Silicones Div.
Spaulding Fibre Co.
Steatite Div.
Stupakoff Div.
Superior Steatite
Suprenant Mfg. Co.
Synthane Corp.
Textolite Dept.
Tri-Dex Electronics
U. S. Gasket Co.
U. S. Rubber
U. S. Stoneware Co.
Warren Wire
Westinghouse Electric
Wilmington Fibre
Zophar Mills, Inc.

INSULATION, Hard Rubber

Amer. Hard Rubber Co.
Goodrich Co.
Goodyear Tire
Luzerne Rubber
Republic Rubber Div.
U. S. Rubber

INSULATION, Thermal

Armstrong Cork
Auburn Mfg. Co.
Biggs Co.
Centralab Div.
Dow Corning
Electronic Mechanics, Inc.
General Instr. Co.
Gordon Co., Claud S.
Hermetic Sealed Prods.
L-O-F Glass Fibers
Raybestos-Manhattan
Reynolds Cement Co.
Richardson Co.
Rubatex Div.
Sauereisen Cement
Spaulding Fibre Co.
Steatite Div.
Stupakoff Div.
Superior Steatite
Tennessee Eastman
U. S. Gasket Co.
Zophar Mills, Inc.

INSULATION RESISTANCE INDICATORS, see Resistance

INSULATION TESTERS (see also Resistance Indicators, Insulation)

Acme Electric
Aircraft Electronics
Antenna Research Lab.
Asch Equipt. Co.

Associated Research, Inc
Automatic Electric
Berkshire Labs.
Beta Electric
Biddle Co., James G
Boonton Radio Corp
California Magnetic
Cal-Tronics Corp
Clough-Brengle
Columbus Products
Communication Meas. Lab
Comtor Co.
ConRay Corp
Custom Scient. Insts
Daven Co.
Davenport Mfg
Del Electronics
Dice Co.
Dit-Mco, Inc
Eastern Specialty
Electric Hotpack
Electro Devices (St. Louis)
Electro-Mec Lab.
Electro-Tech. Equip
Epic Inc
Federal Products
Federal Telephone & Radio
Fielden Instr. Div.
Freed Transf. Co.
Fruengel, Inc
GE, Apparatus Sales
General Instr. Co
General Radio Co
Geier & Bluhm
Hermetic Sealing Corp
Hewlett Packard
Hewson Co.
Hickok Electcl. Instr
Ideal Industries, Inc.
Industrial Gauges Corp
Industrial Insts., Inc.
Industrial Test Equipt
Jack Scientific Co., Bill
Kahn & Co.
Keithley Insts., Inc.
Kellogg Switchboard
Knopp Inc.
Larson Instr. Co
Leeds & Northrup
Manson Labs.
Minn.-Honeywell, Boston
Multi-Amp Corp.
National Pneumatic Co
Niagara Electcl. Instr
Opad Electric Co.
Panellit Corp.
Peschel Electronics
Pimex, Inc.
Precise Measmts. Co
Radio City Products
Radio Frequency Labs
Rawson Electcl. Instr
Reon Resistor Corp
Rubicon Co.
Scott Testers
Shallcross Mfg.
Sherron Metallic
Simpson Electric
Slaughter Co
States Co.
Sticht Co., Herman H
Superior Insts.
Testing Machines, Inc
Thordarson-Meissner
Transistor Devices
United Optical
U. S. Testing Co., Inc
Weston Instr.
Winslow Co

INSULATORS, Ceramic, including Special Shapes

Amer. Lava Corp
Amersil Co., Inc.
Armstrong Cork
Cambridge Thermionic
Centralab Div.
Ceramatronics, Inc.
Champion Spark Plug
Cooper Dev. Corp
Dearborn Scientific
Du-Co Ceramics
Electronic Mechanics
Erie Resistor
Farnsworth Electronics
Fish-Schurman
Garde Mfg. Co.
Genl. Ceramics & Steatite
GE
Gordon Co., Claud S.
Internat. Prods. Corp
Johnson Co., E. F.
Jones Optical Works
Kearfott Co.
Keller & Co., L. H.
Kimble Glass Co.
Lapp Insulator
McDanel Refractory
Millen Mfg. Co.
Molex Products
Morganite, Inc.
Mycalex Corp. of Amer
Saxonburg Ceramics
Steatite Div.
Steward Mfg.
Stupakoff Div.
Superior Steatite
Sweets Co., Martin
Taurus Corp.
Thermo Materials, Inc.
U. S. Gasket Co.
U. S. Stoneware Co.

INSULATORS, Fused Quartz, see Quartz, Fused

INSULATORS, Thermocouple, see Thermocouple Insulators

INTEGRATORS, Electrical and Electronic

Allegany Instr. Co
Avion Div.
B-I-F Industries
Bell Aircraft Corp
Bendix, Eclipse-Pioneer-Berkeley Div.
Bristol Co.
Consolidated Avionics
Detroit Contls., Mil. Prod
Disc Instr. Co
Donner Scientific
Electro Precision
Electro-Mechanical Development
Electrol, Inc.
Electronic Engrg
Electronic Tube Corp
Farnsworth Electronics
Fed. Telephone & Radio
Fischer & Porter Co
Foxboro Co
Gyroscopes, Inc
Hagan Chem. & Controls
Kearfott Co.
Librascope, Inc
Manning, Maxwell & Moore
Medical Electronics Dev
Newton Co.
Penn Instrs. Div
Philbrick Researches
Potter Instr. Co
Reeves Instr. Corp.
Reflectone Corp.
Republic Flow Meters
Servo-Tek Prods. Co.
Southw. Indust. Electron
Stewart Instr. Co.
Systron Corp.
Universal Match
Virginia Electronics
Wang Labs., Inc.
Wiancko Engrg. Co

INTEGRATORS, Mechanical and Electromechanical (see also Planimeters, also Totalizers)

Allegany Instrument Co.
Amer. Meter Co.
Avion Div.
B-I-F Industries
Bailey Meter Co.
Barton Instr.
Bell Aircraft Corp
Belock Instr.
Bendix, Eclipse-Pioneer
Bristol Co.
Bruning Co., Charles
Cedar Engrg., Inc.
Datex Corp.
Detroit Controls., Mil. Prod
Disc Instr. Co.
Fischer & Porter Co.
Ford Instrument Co.
Foxboro Co.
Gap Instr. Co
Gyroscopes, Inc.
Hagan Chem. & Controls
Hays Corp.
Helipot Div.
Humphrey, Inc.
Inaco Company
Instr. Devel. & Mfg.
Instron Engrg.
Kaiser Aircraft & Elect.
Kearfott Co.
Librascope, Inc.
Los Angeles Scient.
Newton Co.
Penn Instrs. Div.
Physics Res. Labs., Inc.
Reeves Instr. Corp.
Reflectone Corp.
Republic Flow Meters
Rockwell Mfg. Co.
Royson Engrg. Co.
Servonics, Inc.
Taylor Instr. Cos.
Transval Engrg. Corp.

INTERFEROMETERS, see Dimensional Gages, Optical

INVERTERS, DC to AC

Airpax Prods. Co.
Amer. Television & Radio
Arnoux Corp.
Ballantine Labs.
Bendix, Eclipse-Pioneer
Bendix, Red Bank
Bogue Elect. Mfg.
Breeze Corporations
Brinkmann Instruments
Bristol Co.
Brunswick Instruments
Burroughs Corp.
C.G.S. Labs.
Carol Electronics
Carter Motor Co
Cook Electric
Cornell-Dubilier
DuMont Labs., Allen B.
Dynamics Res. Assoc.
Elcor, Inc.
Electro Engrg. Prod. Co
Electronic Assocs.
Electronic Measurements
El Ray Motor Co
Empire Devices
Ford Instr. Co.
GE Apparatus Sales
GE, Low Volt. Switchgr.
Helipot Div.
Holtzer-Cabot
Impact Register Co
Instr. Associates
Kellogg Switchboard
Lectronic Research Labs
Leland Electric
Marconi Instruments
Metrolog Corp
Minn.-Honeywell, Boston
Motordyne, Inc.
NJE Corp
Nader Mfg. Co
Perkin Engrg. Co
Power Supplies
Rheem Mfg. Co
Robertshaw-Fulton
Sorensen & Co.
Summers Gyroscope
Transval Engrg. Corp
Universal Transistor
Varo Mfg. Co., Inc.
Vibration Research Labs
Walker Div.
Western Design & Mfg
Western Gear Corp

ION EXCHANGE COLUMNS

Ace Glass
Barnstead Still & Ster. Co
Bogue Elect. Mfg. Co.
Enley Products
Fischer & Porter Co.
Greiner Co., Emil
Harshaw Scientific Div
Kontes Glass
La Motte Chem. Prod
Penfield Mfg. Co
Permutit Co.
Res. Specialties
Scientific Glass App.
Will Corp

ION EXCHANGE RESINS

Barnstead Still & Ster. Co
Bogue Elect. Mfg. Co
Dow Chemical Co.
Enley Products
Fischer & Porter
Fisher Scientific
Greiner Co., Emil
Hagan Chem. & Controls
Harshaw Scientific Div.
Infilco
Penfield Mfg. Co
Permutit Co.
Res. Specialties

ION TRAPS

Clarostat Mfg. Co
DuMont Labs., Allen
Greiner Co., Emil
Process & Instrs.

IONIZATION CHAMBERS for RADIOACTIVITY (see also Radioactivity)

Anton Electronics Labs
Applied Physics Corp.
BJ Electronics
Baird-Atomic
Bendix, Cincinnati Div
Brinkmann Instruments
Cambridge Instr. Co.
C.G.S. Labs.
Chatham Electronics Div
Cook Electric
Curtiss-Wright
Detectolab, Inc.
Detectron Co.
Electronic Products Co
El-Tronics, Inc.
Farnsworth Electronics
GE, Apparatus Sales
GE, X-Ray Dept
Hallikainen Instruments
Henson Co., Fred C.
Instrument Tool & Engrg
Instruments Inc.
Jordan Electronics
Landsverk Electrometer
NRD Instr. Co.
Nuclear Chicago
Nuclear Devel. Lab.
Nuclear Electronics
Nuclear Measmts. Corp
Nuclear Science & Engrg
Nucleonic Corp.
Ohmart Corp.
Radiation Counter Labs
Radioactive Products, Inc.
R-C Scientific Instr.
Specl. Insts. Lab.
Technical Assocs.
Tracerlab, Inc.
United Engrs., Inc
Victoreen Instr. Co.
Western Radiation Lab.
Wood Counter Lab.

IRON, Commercially Pure

Amer. Rolling Mill Co.
Baker Chem. Co.
Crucible Steel

IRON, Norway

Ferner Co.

ISOTOPES, Radioactive, see Radiactive Isotopes

JACKS, Coaxial, see Connectors

JACKS, Plug-in, see Connectors

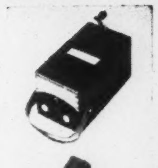
JEWELERS' LATHES, Saws, etc.

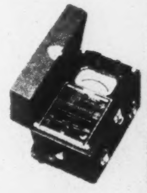
Circular Tool Co., Inc.
Derbyshire, Inc.
Dessau Co.
Disston & Sons
Dixon, Inc.
Elgin Natl. Watch
Ferner Co.
Fineisen, A. R.
Gallien, R. P.
Goodwin, Edwin J.
Grobet File Co.
Hirschmann Co.
Jadow Inc.
Kastner, Charles
Kendrick & Davis
Marshall Co.
Modern Tech. Supply
Newall Mfg.
Sickles & Sons

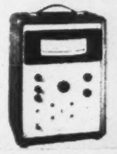
When Using This Guide look under the variable, e.g., Pressure Gages (not Gages, Pressure); or look under the noun—Magnets, Permanent (not Permanent Magnets).

MEGOHMER
INSULATION TESTERS

GENERATOR TYPES







"MINOR" Dwarf Size, 3 lbs., 500 Volts DC, 50 megohms, Bulletin 450

"MAJOR" Small size constant pressure, 500 Volts DC, 50 megohms. Extra ohm scale. Bulletin 465

"STANDARD" Heavy duty constant pressure 500 or 1000 Volts DC. Ranges to 2000 megohms. Bulletin 455

BATTERY VIBRATOR TYPES

"MODEL B-7" Precision Ohmmeter-Megohmmeter. 2 megohm ranges, 2 ohm ranges, 2 test potentials. Bulletin 440

"MODEL B-6" 4 instruments in 1. Ranges: 200 megohms, 2000 ohms, AC & DC volts up to 600. Bulletin 441

PLUG-IN-TYPE

115 V. AC line Operated. **New Model P-1** Test Potential 500 V. DC or 1000 V. DC. Ranges: 0-100 or 0-1000 or 0-2000 Megohms. Bulletin 451

ELECTRONIC TYPE
20,000,000 Megohms

Model 29A with 11 ranges. Measures from 300,000 ohms to 20 million megohms. Test Potentials 85V DC and 500V DC. Bulletin 1029

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- Arc Resistance Testers Types ART-1, ART-2.
- Megohmmeters for Insulation Resistance-Type L Series.

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Industrial Instruments Engineering Corp.

Industrial Instruments Engineering Corp.
89 Commerce Road, Cedar Grove, Essex County, N. J.

For more information circle **280** on inquiry card.

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defined by the dictionary
. . . . "the quality or state of being precise; accuracy; mechanical exactness."

defined by an instrument maker . . .

Swiss American

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Sapphire and Ruby
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Thomas & Skinner
Wakmann Watch Co.
Wilder, Inc.

JEWELS, Instrument

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Allied Products Div.
Amer. Laubscher Corp.
Automatic Electric
Bache & Company, Semon
Bird & Co.
Borel & Co.
Braecher Co.
Dessau Co.
Drake Mfg. Co.
Eastern Specialty
Elgin Natl. Watch
Federal Screw Prods.
Ferner Co.
Gallien, R. P.
Gatti, Aurele M.
GE Apparatus Sales
Hamilton Watch
Imetra Co., Ltd.
Industrial Jewel Bear.
Instrument Prods. Corp.
Jadow Inc., B.
Johnson Co., E. F.
Kastner, Charles
Keller & Co.
King Gem Co.
Lynn, Robert M.
Mallory & Co.
Marshall Co., P. R.
Modern Tech. Supply
Moser Jewel Co.
Powers, George
Preco Co.
Regal Instr. Co.
Steel Co.
Swiss Amer. Jewel-Bear.
Swiss Jewel Co.
Synthetic Gems & Jewels
Vallorbs Jewel Co.
Wakmann Watch Co.
Weston Instr.
Worley Jewel Co.

JEWELS, Instrument: Substitute, Glass

Aerolite Electronics
Automatic Electric
Bache & Company, Semon
Bird & Co.
Deknatel and Son
Drake Mfg.
Gallien, R. P.
GE, Apparatus Sales
Industrial Jewel Bear.
Johnson Co., E. F.
Keller & Co., L. H.
Linde Co.
Meikle, John
Moser Jewel Co.
Porter, Geo. K.
Preco Co.
Regal Instr. Co.
Steel Co., Herman D.
Vallorb Jewel Co.
Weston Instr.
Worley Jewel Co.

JOB TIMING RECORDERS, see Time Recorders

JUNCTION BOXES

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Adalet Mfg.
Aerolite Electronics
Airtron, Inc.
Artisan Metal Works
Bud Radio, Inc.
Cook Electric
DuBois Engrg. & Mfg.
Joy Mfg. Co.
Maxson Instruments
Moore & Co., Samuel
Nelson Electric Mfg.
Nikon, Inc.
Penn Panel & Box Co.
Pyle-National
Reiner Electronics
Spivey, Inc., James S.
Suffolk Prods. Co.
Virginia Electronics
Zero Mfg. Co.

KERR CELLS

Baird-Atomic
Engelhard, Chas., Inc.
General Physical Lab.
Hycon Electronics
Precise Measmts. Co.

KEYS, Lock, see Hardware

KEYS, Telegraphy, see Telegraphy

KLYSTRONS, see Tubes, Klystron

KNIFE EDGES, Agate

Brazilian Trading Co
Dearborn Scientific
Imetra Co., Ltd.
Kastner, Charles
King Gem Co.
Lab. Optical
Powers, George
Regal Instr. Co.
Vallorbs Jewel Co.

KNIFE EDGES, Sapphire

Bird & Co.
Elgin Natl. Watch
Esco Products
Gatti, Inc., A. M.
Imetra Co. Ltd.
Kastner, Charles
King Gem Co.
Lab Optical
Powers, George
U. S. Stoneware Co
Vallorbs, Jewel Co
Waltham Precision Tool
Worley Jewel Co.

KNOBS, Metal and or Plastic

Ace Plastic Co
Acton Labs
Alden Products
Arens Controls, Inc
Cambridge Thermionic
Bache & Company, Semon
Bodnar Industries
Carroll Co.
Chicago Molded Prods.
Cincinnati Time Rec. Co
Consol. Molded Prods
Corbin Cabinet Lock
Croname, Inc.
Dale Prods., Inc.
Daven Co.
Dimco-Gray
DuMont Labs., Allen
Eby, Inc., Hugh H.
Erie Resistor
Federal Screw Prods
General Industries Co
General Radio
Gits Molding Corp
Grammes Co., L. F.
Gries Reproducer Corp
Grigoleit Co.
Hartford Machine Screw
Imperial Molded Prods.
Johnson Co., E. F.
Kurz-Kasch
Litton Industries
Luzerne Rubber
Mallory & Co., P. R
Maryland Etching Co
Meyer-Opticraft
Millen Mfg. Co.
Molded Insulation Co
Moss & Co., Henry
Muirhead Instrument
National Co.
Pacific Transducer
Phaostron Co.
PIC Design Corp.
Raytheon Mfg. Co.
Remler Co.
Research Devel. Mfg
Richardson Co.
Rogan Bros.
Smith, Inc., Herman H
Stokes Molded Prods.
Sun Dial Corp.
Sylvania Elect. Prods.
U. S. Engrg. Co.
U. S. Instr. Corp.
U. S. Radium
Universal Aviation Equipt
Vallorbs Jewel Co.
Van Dyke Instr. Inc.
Waldom Electronics
Waterbury Cos., Inc.
Watertown Mfg. Co.
Winslow Co., Inc.

KNURLS and KNURLING WHEELS

Armstrong Bros. Tool Co.
Bachmann Co., Eric R.
Billings & Spencer
Dixon, Inc.
Eitzen Co., Louis C.
Fineisen, A. R.
Parker-Hartford Corp
PIC Design Corp.
Pratt & Whitney
Schmidt, Inc., Geo. T
Wade Tool Co.

KVA INDICATORS and or RECORDERS (see also Electric Power)

Amer. Mach. & Foundry
Bristol Co
Esterline-Angus
Hickok Elec. Instr
Landis & Gyr
Leeds & Northrup
Orban Co. Kurt
Sangamo Electric
Westinghouse Electric

KYMOGRAPHS

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Cambridge Thermionic
Central Scientific
General Biological
Geotechnical Corp.
Gorrell & Gorrell
Instrumentation Assoc
Micro-Metric Instr.
Phipps & Bird
Sargent & Co., E. H.
Stoelting Co.

LABORATORY APPARATUS and SUPPLIES (see also Analytical Instruments, also Stirrers)

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Advanced Insts.
Airborne Instruments
Aloe Co., A. S.
Amer. Electronic Labs
Amer. Instrument Co.
Amer. Meter Co.
Amer. Optical Co.
Amer. Platinum Works
Amer. Research
Amersil Co.
Amsler Buehler
Anetsberger Bros.
Ann Arbor Instr. Works
Applied Research
Arachne Lab.
Atlantic Research
Autoclave Engrs.
Avionic Supply
Baird-Atomic
Baker & Co.
Baltimore Biological Lab
Baltimore Instr.
Barnstead Still & Ster
Bar-Ray Products
Bausch & Lomb
Beckman Div., Beckman
Behm & Sons Co.
Bel-Art Products
Bellco Glass, Inc.
Berger Scient. Supplies
Best Scient. Glass
Bethlehem App. Co.
Bird & Co.
Bishop & Co., J.
Blue M Electric Co
Boehmke Optical
Boekel & Co.
Boonton Radio
Booth Co.
Borden Engrg. Div.
Barbender Instrs.
Buffalo App. Corp
Buhl Optical
Burrell Corp
Burton Mfg. Co.
Bush Assocs.
Cal-Astro Optical
Calkins Co.
Callahan & Co
Cargile, R. P.
Carver Inc.
Central Scientific
Century Instr. Co.
Chandler & Stedman
Chatham Electronics
Chatillon & Sons
Chemical Rubber Co.
Chicago App. Co.
Chicago Dial Co.
Clay-Adams, Inc.
Colloid Equipt. Co.
Computer Control Co
Conax Corp
Conn-Craft Co.
Cooke, Frank
Cooper-Hewitt
Coors Porcelain Co
Corning Glass Works
Croname, Inc.
Crow Electri-Craft Corp.
Crystal Glass Tube
Curtin & Co.
Custom Scient. Instr.
Cuthbert Co.
Dahl & Co., G. W.
Daigger & Co., A.
Davidson Assocs.
Davidson Mfg.
Dearborn Glass Co
Dearborn Scientific
Denver Fire Clay Co
Dietert Co.
Dillon & Co.
Distillation Products
Douglas Radio Labs.
Dressen-Barnes
E-C App. Co.
Eastern Industries
Eastern Scientific
Eaton-Dikeman
Eberbach & Son
Edna Lite Co.
Eitzen Co., Louis C.
Electric Hotpack
Electro-Mec Lab.
Electro-Medical Lab.
Electro Products Labs.
Electrosig Corp.
Electro Tech Equipt.
Ellison Draft Gage
Empire Lab. Supply
Engelhard, Chas., Inc
Engrg. Res. & Devel.
Erb & Gray
Ercona Corp.
Ervin Co.
Esco Prod.
Etched Prods. Corp.
Everett Products
Farrand Optical
Fassett Co.
Federal Tool Engrg
Feller Engrg. Co.
Ferguson Co.
Ferner Co.
Fischer & Porter Co.
Fish-Schurman
Fisher Scientific
Food Technology, Inc.
Fredericks, George E.
Freed, J. Melvin
Friedrich & Dimmock
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Gardner Laboratory
GE, Apparatus Sales
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General Lab. Supply
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Giannini & Co.
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Greiner Glassblowing Lab.
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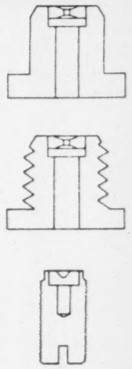

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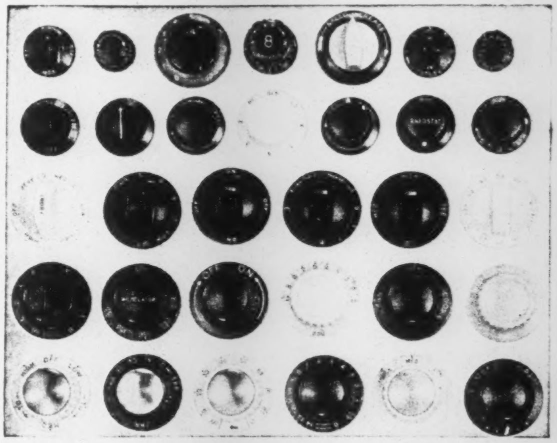

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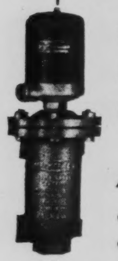

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Amer. Electronics
Amer. Gas & Chemicals
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Riehle Div.
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Taber Instr. Co
Testing Machines, Inc.
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LENS MOUNTINGS, see Optical Parts

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Curtiss Labs.
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Ercona Corp.
Esco Prods. Co.
Fecker, Inc.
Federal Prods. Corp.
Gaertner Scientific
Gordon Enterprises
Hall-Barkan
Instrument Devel. Labs.
Jadow, Inc.
Kollmorgen Optical
Lab. Optical
Los Angeles Scient. Instr.
Lynn, Robert M.
Merry Instr. Co
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Northrop Anaheim
Opplem Co.
Palos Optical
Penn Optical & Instr.
Perkin-Elmer
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Photogrammetry, Inc.
QOS Corp.
Robertshaw-Fulton
Testing Machines, Inc
Tinsley Labs.
Unertl Optical
Zenith Optical Lab.
Zoomar Corp.

LENSES, Bullseyes, not optically ground (see also Glass, Raw)

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Automatic Electric
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Corning Glass Wks.
Dialight Corp.
Drake Mfg.
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Esco Prods. Co.
Felsenthal Sons
Fish-Schurman
General Scientific
Gordon Enterprises
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Heitz, Inc., Karl
Inlaid Optical
Internat. Optical
Johnson Co., E. F.
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Lancaster Glass
Lynn, Robert M.
Optics Mfg. Corp.
Parisian Novelty Co
Plummer & Kershaw
Precision Prods. Co.
Regal Instr. Co.
Richardson Co.
Signal Indicator Corp.
Simpson Optical
Swift & Anderson, Inc.
Tiffen Marketing Co.
Torrance Glass & Color

LENSES, Low Reflecting Surfaces

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American Thermo-Ware
Apex Optical
Apex Specialties
Askania-Werke A. G.
Axler Associates
Bache & Company, Semon
Bausch & Lomb
Bray Optical
Bronoptics Co.
Buhl Optical
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Cal-Astro Optical
Co-Optical Mfg.
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Dearborn Scientific
Dome Precision Corp.
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Erie Resistor
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Gaertner Scientific
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Gordon Enterprises
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Hathaway Instr. Co.
Heitz, Inc., Karl
Inlaid Optical
International Optical
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Johnson Co., E. F.
Jones Optical Works
Keim Precision Mirrors
Kollmorgen Optical
Lancaster Glass
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Zenith Optical Lab.
Zoomar Corp.

LENSES, Optical including Fused Quartz, see Optical Parts

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Cleveland Controls
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Deltron, Inc.
Electronic Prods. Co.
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Fuller Co.
Gaydon Co.
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Indust. Electronic Conts.
Instruments Inc.
Isotope Prods., Inc.
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Photobell Co.
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Synchro-Start Products
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Swartwout Co.
Synchro-Start Products
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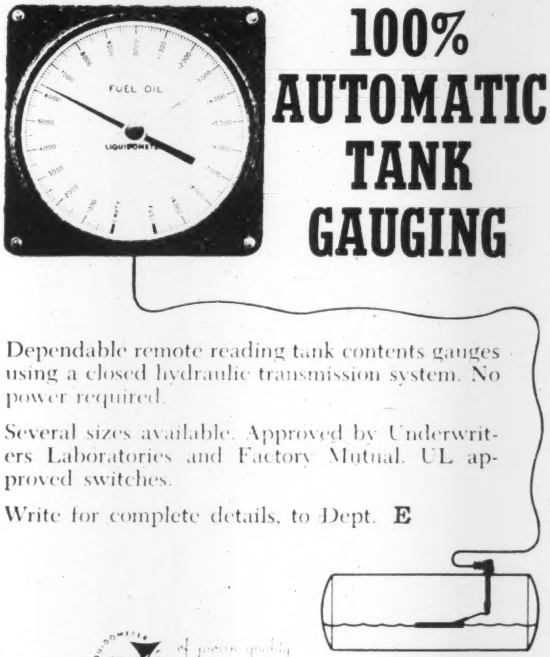

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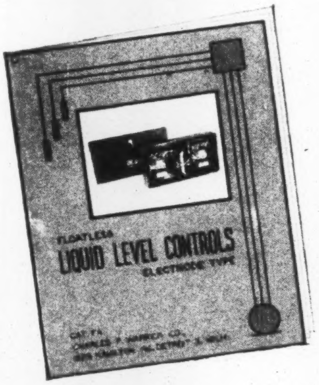

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Fielden Instr. Div.
Foxboro Co.
Fuller Co.
Gems Co.
GE, X-Ray Dept.
Gilmore Industries
Instruments Inc.
Isotope Products, Inc.
Jarco Services, Inc.
Jeffrey Mfg. Co.
Jordan Corp.
Manning, Maxwell & Moore
Nuclear Corp. of Amer.
Nuclear Research
Ohmart Corp.
Oil Well Water Loc. Co.
Photobell Co.
Ramsey Engrg. Co.
Republic Flow Meters
Richardson Scale
Robertshaw-Fulton
Scrayco Mfg.
Shand & Jurs Co.
Texas Instrs., Inc.
Trimount Instr. Co.
United Engineers, Inc.
Victory Engrg. Corp.

LEVEL INDICATORS and/or RECORDERS, Liquid, also Tank

Amer. Chain & Cable
Amer. Meter Co.
Ann Arbor Instr. Wks.
Anton Electronic Labs.
Askania-Werke, A. G.
Assoc. Valve & Engrg.
Astra Tech. Inst.
Autocall Co.
Autom. Control Co.
Autom. Timing & Control
Automation Prods., Inc.
Aviation Engrg. Co.
Avien, Inc.
B-I-F- Industries
B. W. Controller
Bacharach Indust. Instr.
Bailey Meter Co.
Baldwin-Lima-Hamilton
Barton Instr. Corp.
Basic Controls, Inc.
Bastion-Blessing
Bendix, Cincinnati Div.
Bendix, Eclipse-Pioneer
Bendix-Friez
Bendix, Pacific
Bin-Dicator Co.
Bogue Elect. Mfg. Co.
Boston Auto Gage
Bowser & Co.
Bristol Co.
Brooks Rotameter
Builders-Providence
Bunnell Co., J. H.
Campbell Co.
Can. Rad. & Uran.
Climax Div.
Control Corp.
Cook Electric
Crescent Engrg. & Res.
Crosby Valve & Gage
Datran Electronics
Davis Reg. Co.
Deltron, Inc.
Diamond Power Specialty
Dickson Co.
Dwyer Mfg. Co.
Electric Auto-Lite
Elect. Indicator Corp.
Electric Tachom. Corp.
Elematic Equipt. Co.
Electronic Prods. Co.
Engineering Res. Assoc.
Ess Instr. Co.
Esterline-Angus
Excel Electric Service
Falcon Alarm Co.
Femco, Inc.
Fielden Instr. Div.
Fischer & Porter Co.
Fisher Governor
Fisher Research Lab.
Foxboro Co.
Frick Co.
Garlynn Engrg. Co.
Gems Co.
General Controls Co.
GE, Apparatus Sales

Announcing
the New
Jerguson
MAGNETIC GAGE
For Liquid Levels

An important advancement in liquid level observation for plants with dangerous explosive or inflammable conditions.

Safety design seals against escaping gases.

Measuring mechanism in stainless steel chamber.

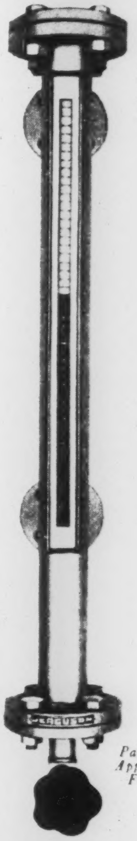
Scale mounted outside chamber; magnetically actuated through chamber wall.

Distinct, accurate level shown in red contrasted with silver above.

Job designed, correlating pressure, temperature, and specific gravity.

Available with electric alarms.

Can also be used for interface indication.



Patent Applied For

Write now for engineering sheet on Jerguson Magnetic Gages.

JERGUSON

Gages and Valves for the Observation of Liquids and Levels

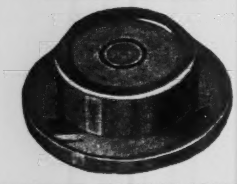
JERGUSON GAGE & VALVE COMPANY
100 Adams Street, Burlington, Mass.
Offices in Major Cities
In Canada: Peacock Bros. Ltd.

For more information circle **163** on inquiry card.

G & B
PRECISION LEVELS

Sizes
3/8" to 2"

VIALS—Variations of Size, Sensitivity, Color, Graduations, Operating Temperatures, and Radium Treatment.



STANDARD CIRCULAR LEVELS

Part No.	Diameter	Height	Sensitivity
5	11/16 inch	5/16 inch	130 min.
7	3/4	5/16	130
6	7/8	3/8	45
10	1	7/16	45
12	1 1/4	7/16	45
14	1 7/16	33/64	20
16	1 3/4	5/8	10
18	2	11/16	10
20	2 1/4	11/16	10
24	2 3/4	11/16	10

GEIER & BLUHM, INC.

TROY, N. Y. **U.S.A.**

For more information circle **164** on inquiry card.

ARISTO
MIC-O-LITE
for
SHADOW FREE ILLUMINATION

The Mic-O-Lite is a small cold light ring source designed especially to produce shadow free illumination on small objects and specimens.

Housed in a doughnut type reflector which provides an aperature in its center, the Mic-O-Lite forms an ideal source for inspection, investigation, and research in the industrial and scientific fields. A variety of interchangeable lamps are available.

FOR EXPOSING PRINTED CIRCUITS, The ARISTO TRANS-LUMINATOR, equipped with Aristo U.V. 36 (3650A) grid lamps provides a COOL, EVEN, AND FAST light over its entire glass area.

Only 6 inches deep the unit is available in sizes from 12 x 12 inches square up to 32 x 36 inches. Easily installed in any printed circuit production setup, the Trans-Luminator, free of heat, glare, and dust, assures finer circuit reproductions faster and with greater working comfort.

Write for descriptive literature.

ARISTO GRID LAMP PRODUCTS INC.
65 Harbor Rd., Port Washington No., L. I., N. Y.

For more information circle **165** on inquiry card.

GE, X-Ray Dept.
Geotechnical Corp.
Gilbert & Barker
Gilmore Industries
Gorn Electric
Gorrell & Gorrell
Gotham Instr. Co.
Gray Instr. Co.
Grove Valve & Reg.
Guardian Electric
Gurley, W. & L. E.
Hagan Chem. & Controls
Hammel-Dahl
Hartford Mach. Screw
Henry Valve Co.
Henschel Corp.
Hathaway Instr. Co.
Hawk Tool & Engrg.
Hays Corp.
Henry Valve Co.
Hill & Co., E. V.
Indust. Electronic Conts.
Indust. Electronics (Mass.)
Industrial Instr. Corp.
Instrument Lab. Inc.
International Filter Co.
Instruments Inc.
Jarco Services
Jerguson Gage
Jo-Bell Products
Johnston & Jennings
Jordan Corp.
Keckley Mfg. Co.
Kellogg Switchboard
King Engrg. Co.
Leeds & Northrup
Leupold & Stevens
Liquidepth Indicators
Liquidometer Corp.
Liquid Scale Gauge Co.
Liquidivision Gauge
Lonergan Co., J. E.
Lufkin Rule Co.
Lumenite Electronic
Magnetic Industries
Magnetrol, Inc.
Manning, Maxwell & Moore
Marsh Corp.
Marshalltown Mfg.
Mason-Neilan Div.
McAlear Mfg.
McNeill Engrg. Co.
Meriam Instr. Co.
Minneapolis-Honeywell
Mira Scientific Instr.
Moore Products
NRD Instr. Co.
Natural Gas Equipt. Co
Norden-Ketay
Nuclear Corp. of Amer
Nuclear Research
Ohmart Corp.
Oil Well Water Loc. Co
Panalarm Products, Inc.
Panellit Corp.
Paragon Electric
Penberthy Injector Co.
Penn Insts. Div.,
Pedometer Corp.
Petrometer Corp.
Phillips & Co., H. A.
Photoswitch Div.
Pitometer Log Corp.
Pneumercator Co., Inc.
Precision Radiation
Prec. Thermom. & Insts.
Preferred Utilities Mfg.
Radioactive Products
Rahm Instruments
Ramsey Engrg. Co.
Reliance Gauge Column
Remco, Inc.
Republic Flow Meters
Republic Mfg. Co.
Revere Corp.
Rochester Mfg. Co.
Rockwell Engrg. Co.
Rosen Engrg. Prods.
Schutte & Koerting
Shand & Jurs
Sheffield Corp.
Simmonds Aerocessories
Simplex Valve & Meter
Smith Corp., A. O.
Standard Valves Inc.
Statham Labs.
Strahman Valves, Inc.
Swartwout Co.
Stewart-Warner
Taylor Instr. Cos.
Texas Insts., Inc.
Texas Instrs. Ind. Div.
Tracerlab, Inc.
Trerice Co.
Trimount Instr. Co.
U C Indicator Sales
Uehling Instr. Co.
Ultradyne Engrg. Labs.
United Control Corp.
United Engineers, Inc.
U. S. Gauge Div.
Vapor Recovery Systems
Victory Engrg. Corp.
Viking Instruments
Virginia Electronics
Wallace & Tiernan
Water Level Controls
Weksler Instrs.
Warrick Co.
Westinghouse Electric
Weston Electcl. Instr.
Wiancko Engrg. Co.
Williams Gauge Co.
Yarnall-Waring

LEVEL TRANSMITTERS (see also Pressure Differential Transmitters)

Askania Reg.
Acoustica Assoc., Inc.
Automatic Control Co.
Askania-Werke, A. G.
Automation Prods., Inc.
B-I-F Industries
Bailey Meter Co.
Barton Instr.
Black, Sivalls & Bryson
Bendix Aviation Corp.
Bristol Co.
Fielden Instr. Div.
Fischer & Porter
Fisher Governor
Foxboro Co.
Geotechnical Corp.
Hagan Chem. & Controls
Hays Corp.
Healy-Ruff
Instruments Inc.
Jarco Services, Inc.
Jerguson Gage
Leupold & Stevens
Leslie Co.
Liquidometer Corp.
Liquidivision Gauge & Con.
Manning, Maxwell & Moore
Mason-Neilan Div.
McDonnell & Miller
Minneapolis-Honeywell
Moore Products
Narda Ultrasonic Corp
Norwood Controls
Nucor Research
Ohmart Corp.
Penn Insts. Div.
Ramsey Engrg. Co.
Republic Flow Meters
Revere Corp. of Amer.
Robertshaw-Fulton
Shand & Jurs
Simmonds Accessories
Simplex Valve & Meter
Swartwout Co.
Taylor Instr. Cos.
United Engineers, Inc.
Vapor Recovery Systems
Water Level Ctrls.

LEVELLING SADDLES for Flowmeters, etc.

Amer. Meter Co.
Commercial Iron Works
Robinson Orifice Fitting

LEVELS, Abney

Bruning Co., Charles
Dietzgen Co., Eugene
Garlynn Engrg. Co.
Graf-Apsco Co.
Gurley, W. & L. E.
Jarrell-Ash
Leupold & Stevens
Opplem Co.
White Co., Inc., David

LEVELS, Dumpy, see Surveying Instruments

LEVELS, Hand, Including Precision, Prism, and Spirit

Askania-Werke A. G.
Bache & Company, Semon
Berger & Sons
Berger Scient. Sups.
Bostrom-Brady
Bruning Co., Charles
Brunson Instr. Co.
Dietzgen Co.
DoAll Co.
Edmund Scientific
Electronic Prods. Co
Engis Equipt. Co.
Ercona Corp.
Fecker Inc.
Ferner Co.
Fish-Schurman
Gaertner Scientific
Garlynn Engrg. Co.
Geier & Bluhm
Glogau & Co.
Graf-Apsco
Gray Instr. Co
Griswold Mfg.
Gurley, W. & L. E.
Heiland Div.
Helio Instr. Co
Jarrell-Ash
Keuffel & Esser
Leupold & Stevens
Los Angeles Scient.
Lufkin Rule Co.
Meyer-Opticraft
Millers Falls Co.
Opplem Co.
Opto-Metic Tools
Pittsburgh Instr. & Mach.
Pratt & Whitney
QOS Corp.
Republic Lens Co.
Scherr Co.
Smith & Anderson
South Bend Lathe Works
Stanley Works
Starrett Co.
Stratex Instr. Co.
Suverkrop Instruments
Swift & Anderson, Inc
Taft-Peirce
United States Blue Print
Warren-Knight
Weber Co., F.
White Co., Inc., David
Wild Heerbrugg
Zeiss, Inc., Carl

LEVELS, Surveying, see Surveying Instruments

LEVELS, Wye, see Surveying Instruments

LIE DETECTORS, see Polygraphs

LIGHT METERS, see Illumination

LIGHT SOURCES (see also Tubes, Discharge)

Alfa Amer. Corp.
Amer. Optical
Amglo Corp.
Basic Controls, Inc.
Berkeley Div.
Boone Instr.
Burton Mfg. Co
Central Scientific
Chgo. Miniature Lamp Wks.
Cooper-Hewitt Elect.
Dialight Corp.
Dormitzer Elec. & Mfg.
DuMont Labs., Allen B.
Edmund Scientific
Erb & Gray
Fecker Inc.
Fish-Schurman
Gaertner Scientific
Gates & Co.
GE, Lamp Div.
Green Rectifier Co.
Hanovia Chem. & Mfg.
Kemlite Labs.
Lab. Optical
Luxo Lamp Corp.
Macbeth Corp.
Machinery Electrification.
Magnaflux Corp.
Menlo Research Lab.
Meyer-Opticraft
National Carbon
National Spectrographic
Palos Optical
Perkin-Elmer
Phoenix Prec. Instr.
Prec. Glass Prods. Co.
Precision Products
Rudolph & Sons
Scient. Inst. Dev. Lab.
Stocker & Yale, Inc.
Sylvania Elec. Prods.
Tri-Tronics Co.
Ultra-Violet Prods.
U. S. Radium
Welch Mfg. Co., W. M.
Western Elect. Corp.
Western Union
Worner Electronic Devices

LIGHT SOURCES, "Daylight" and White Light

Alden Systems
Amer. Optical
Amglo Corp.
Aristo Grid Lamp Prods.
Atlas Electric
Burton Mfg.
Chapman Labs.
Chgo. Miniature Lamp Wks.
Continental Electric
Esco Products
Ferner Co.
Fredericks, George
Gaertner Scientific
Gates & Co., George W.
GE, Lamp Div.
Haledy Electronic Co.
Instrument Devel. Labs.
Jarrell-Ash
Kemlite Labs.
Lindley & Co.
Macbeth Corp.
Meyer-Opticraft
QOS Corp.
Rudolph & Sons
Sampson Chem. & Pigment
Stocker & Yale
Sylvania Elect. Prods.
Welch Mfg. Co., W. M.
Westinghouse Electric

LIGHT SOURCES, Incandescent

Alfa Amer. Corp.
Amer. Optical
Autron Engrg., Inc.
Basic Controls, Inc.
Bausch & Lomb
Berkshire Labs.
Burton Mfg. Co.
Chgo. Miniature Lamp Wks.
De-Tec-Tronic Corp.
Dialight Corp.
Dormitzer Elec. & Mfg.
Eby, Inc.
Electronics Corp. of Amer.
Engrg. Develp. Labs.
Electronics Devel. Lab.
Electro-Mechanical Development
Fecker, Inc.
Fisher-Pierce
Fredericks, George
G-M Labs.
Gaertner Scientific
Gates & Co.
GE, Lamp Div.
Green Rectifier
Herzog Minia. Lamp Wks.
Laboratory Optical
Leitz, Inc., E.
Lindley & Co.
Luxo Lamp Corp.
Macbeth Corp.
Meyer-Opticraft
Phoenix Prec. Instr.
Pimex, Inc.
Rockwell Engrg. Co.
Rudolph & Sons, O. C.
Signal Indicator Corp.
Stocker & Yale
Sylvania Elect. Prods.
Tung-Sol Electric Inc.
Welch Mfg. Co., W. M.
Worner Electronic Devices
Zeiss, Inc., Carl

LIGHT SOURCES, Infrared, see Infrared

LIGHT SOURCES, Monochromatic

Acme Scientific
Amer. Instr. Co.
Amglo Corp.
Baird-Atomic
Bausch & Lomb
Burton Mfg. Co.
Central Scientific
Chapman Labs.
Cooper-Hewitt
Crane Packing Co.
Davenport Mfg.
Davidson Mfg. Co.
Dearborn Scientific
DoAll Co.
Edmund Scientific
Engis Equipt. Co.
Ercona Corp.
Farrand Optical
Fecker, Inc.
Ferner Co.
Fish-Shurman
Fuess, Inc.
Gaertner Scientific
Gates & Co.,
GE Lamp Div.
General Physical Lab.
Green Rectifier Co.
Hanovia Chem. Mfg.
Huggins Labs.
Jarrell-Ash
Kemlite Labs.
Lab. Optical
Leitz, Inc.
Macbeth Corp.
Mico Instr. Co.
Opplem Co.
Optron Laboratory
Palos Optical
Perkin-Elmer
Pfaltz & Bauer
Phoenix Prec. Instr.
Polarizing Instr.
Prec. Glass Prods. Co
Precise Measmts. Co.
Rudolph & Sons
Spitfire Tool Co.
Stocker & Yale
Scherr Co.
Van Keuren Co.
Williamson Devel. Co.
Westinghouse Electric
Zeiss, Inc. Carl

LIGHT SOURCES, Ultraviolet, see Ultraviolet

LIGHT WAVE MEASURING EQUIPMENT, see Spectrum Analyzers

LIGHTHOUSE INSTRUMENTS

Amer. Gas Accumulator
Triumph Mfg. Co.
Wallace & Tiernan

LIGHTHOUSE TUBES, UHF, see Tubes

LIGHTING CONTROLLERS, see Illumination Controllers

LIGHTING SYSTEMS, Instrument, see Pilot Lights

LIGHTS, see Pilot Lights

LIGHTS, Pilot, see Pilot Lights

LINE CURRENT TEST SETS

Ampco Mfg. Co.
Associated Research
Automatic Electric
Bourns Labs.
Cal-Tronics Corp.
Chicago Indust. Instr. Co.
Columbia Elect. Mfg.
Elect. Facilities, Inc.
Electronic Devel. Lab.
Esterline Angus
Feller Engrg. Co
GE
General Electronic
Gray Instr. Co.
Hickok Electcl. Instr.
Instrument Laboratories
Kahn & Co.
Meter Devices Co.
Minneapolis-Honeywell
Rubicon Instrs.
Nelson Electric Mfg.
Precision Apparatus
Roller-Smith
Sensative Res. Instr.
Sherron Metallic
Simpson Electric
Sticht Co., Herman H.
Transistor Devices
Triplett Electcl. Instr.
United Mfg. Co. Div.
Weston Electcl. Instr.

LIQUID LEVEL, Indicators or Recorders, see Level, Liquid

LIQUID METERS, Inferential Type, see Flowmeters, Inferential Type

LIQUID METERS, Positive Types, see Flowmeters, Positive Displacement

LOAD CELLS (see also Pressure, Weight)

Aero Electronics
Allegany Instruments
Baldwin-Lima-Hamilton
B & F Instrs., Inc.
Cal-Ohm Labs.
Chatillon & Sons
Crescent Engrg. & Res.
Daytronic Corp.
Dillon & Co.
Dynametrics Corp.
Emery Co., A. H.
Fielden Instr. Div.
Foxboro Co.

Gilmore Industries
Indikon Co.
Insco Company
Kistler Instr. Co
Leeds & Northup
Link Engrg. Co.
Martin-Decker Corp.
Phoenix Prec. Instr.
Revere Corp. of Amer.
Ruge Assocs
Statham Instrs.
Taller & Cooper, Inc
Task Corp.
Thwing-Albert
Webster Instrument
Westronics, Inc.
Wiancko Engrg. Co.

LOAD CONTROLLERS, Electrical

Allis-Chalmers
Assembly Products
B/W Controller
Baldwin-Lima-Hamilton
Bogue Elect. Mfg.
Bristol Co.
Cal-Tronics Corp.
Control Engrg. Co.
Cutler-Hammer
Daytronic Corp.
Dillon Co.
Dressen-Barnes Corp.
Ebert Electronics
Electric Reg. Corp.
Fielden Instr. Div.
Fisher-Pierce
Foxboro Co.
General Controls
GE, Apparatus Sales
Gilmore Industries
Hays Corp.
Jordan Co.
Kepco Labs.
Lear, Inc.
Leeds & Northrup
Leslie Co.
Machinery Electrification
Magnetic Amplifiers
Magnetic Instr. Co.
Manning, Maxwell & Moore
Minneapolis-Honeywell
Mosher Electronic
Mullenbach Div.
Norcross Corp.
Ram Meter, Inc.
Robinette Co., W. C.
Sangamo Electric
Shallcross Controls
Sorensen & Co.
Spencer Thermostat Div.
Square D Co.
Stewart Instr. Co.
Streeter-Amet
Taller & Cooper, Inc.
Taylor Instr. Cos.
Westinghouse Electric
Wilson & Co., G. C.

LOAD CONTROLLERS, Weight, see Weight

LOAD INDICATORS and/or RECORDERS, Electrical (see also Power Factor)

Assembly Products
Associated Research
Automatic Electric
Bailey Meter
Baldwin-Lima-Hamilton
Barber-Colman
Bristol Co.
Cal-Ohm Labs.
Chatillon & Sons
Crescent Engrg. & Res.
Daytronic Corp.
Duncan Elect. Mfg.
Dynametrics Corp.
Electric Indicator Co
Electrical Devel. Co.
Esterline-Angus
GE, Apparatus Sales
Gilmore Industries
HD Elect. Co.
Hagan Chem. & Control
Henschel Corp.
Indikon Co.
Kistler Instr. Co.
Landis & Gyr
Leeds & Northrup
Machinery Electrification
Martin-Decker Corp.
Minneapolis-Honeywell
Performance Measmts.
Peschel Electronics, Inc.
Polyphase Instr.
Ram Meter, Inc.
Sangamo Electric
Sensitive Res. Instr.
Stewart Instr. Co.
Streeter-Amet
Sun Electric
Taller & Cooper, Inc.
Triplett Electcl. Instr.
Voltron Products
WacLine, Inc.
Westinghouse Electric

LOCATORS, Fault, Electrical Resistance, see Fault Locator

LOCATORS, Pipe, see Metal Detectors

LOGGERS, Automatic Data, see Data Processing

LOUPES, Eye, see Optical Parts

LOUVER OPERATING DEVICES, see Valve Operating Devices, also Boiler Room Instruments

LUBRICANTS, Instrument, including Pivot, High Temperature, Low Temperature, etc.

Acheson Colloids
Allied Products Div.
Alpha Corp.
Alpha Molykote
Amer. Optical
Bendix, Eclipse-Pioneer
Carbide & Carbon
Consolidated Vacuum Corp.
Crawford Fitting Co.
Custom Lubricant
Daven Co.
Distillation Products
Dixon, Inc.
DoAll Co.
Dow Corning
Eastern Specialty Co.
Edmund Scientific
Eitzen Co.
Elgin Natl. Watch
Ferner Co.
Gallien, R. P.
Gaunt Industries
G. E. Silicone Prod. Dept.
General Cement Mfg.
Graphite Metallizing
Hamilton Watch
Internat. Optical
Jadow Inc., B.
Johnson Engrg. Co.
Kimble Glass Co.
Landis & Gyr
Lehigh Chemical Prods.
Marshall Co.
Newall Mfg. Co.
Nye, Inc.
Owens-Illinois
Precision Scientific
Rohm & Haas Co.
TechnicalEquipt. Co.

LUMBER COUNTERS, see Counters

LUMINESCENT MATERIALS, including Fluorescent and Phosphorescent Paints, Radioactive Phosphors, Radium Paint, etc.

Burton Mfg. Co.
Can. Rad. & Uran.
Carroll Co., J. B.
DuPont
Eisler Electric
Formica Co.
Gallien, R. P.
Miller Dial & Name Pl.
Newall Mfg. Co.
Nuclear Corp. of Amer.
Photo Chemical Prods.
Precise Measmts. Co.
Radiation Res. Corp.
Samson Chem. & Ptg.
Switzer Bros.
Sylvania Elect. Prods.
Ultra-Violet Prods.
U. S. Radium
Werner Co.

LUSTER METERS, see Gloss Meters

MACHINE TOOL CONTROLLERS, including Electronic Control Systems

Allen-Bradley Co.
Analogue Controls, Inc.
Arlin Products
Assembly Products
Austin Company
Automa. Corp. of Amer.
Automation Management
Autom. Switch
Autonetics Div.
Autron Engrg., Inc.
B/W Controller
Barnes Engrg. Co.
Bendix Aviation Corp.
CDC Control Services
Clark Controller Co.
Cleveland Instrument
ConRay Corp.
Control Data Corp.
Control Engrg. Co.
Control Panel Corp.
Cutler-Hammer.
Datascan Inc.
Datex Corp.
Devco Engrg.
Digitronics Corp.
Electric Switch Corp.
Electro-Mech. Div.
Electronic Control Systems
Farrand Optical
Ferrara, Inc.
Feedback Controls
Ferranti Electric
Fish Schurman
Franklin Electronics
GE, Apparatus Sales
General Automation
Genzlinger, Inc.
Hanson-Gorrill-Brian
Hillyer Instr. Co.
Indust. Electronic Engrs.
Industrial Electronics, Inc.
Indust. Gauges Corp.
Internat. Business Mach.
Jordan Co.
L & O Res. & Devel.
Lake Erie Electric
Lessells & Assocs.
Librascope, Inc.
Loral Electronics
Machinery Electrification
Magnetic Instr. Co.
Magnetic Research
Mercoid Corp.
Moog Valve Co.
Nankervis Co.
Nelson Instr. Co.
Newton Co.
Norden-Ketay Corp.
Olympic Devel. Co.
Orban Co., Kurt
Phoenix Prec. Instr.
Photobell Co.
Pratt & Whitney
Raytheon Mfg. Co.
Reeves Instr. Corp.
Royal McBee Corp.
Scientific Instr. Co.
Servospeed Div.
Servo-Tek Products Co.
Sheffield Corp.
Soroban Engrg.
Sparton Cont. Systems
Spencer Mfg. Co.
Sterling Prec. Instr.
Stewart Instr. Co.
Sweets Co.
Taft-Peirce Mfg. Co.
Taller & Cooper
Taylor-Emmett Controls
Telecomputing Corp.
Teleflex Inc.
Tensitron, Inc.
Thompson Products
Topp Industries
Transistor Devices
Tri-Tronics Co.
Ultrasonic Corp.
United Hydraulics
Universal Match
VecTrol Engrg., Inc.
Vickers, Inc.
WacLine, Inc.
Warner & Swasey Res.
Western Gear Corp.
Westinghouse Electric

MACHINES, Automatic Circuit Assembly, including Automatic Wiring, Automatic Component Assembly, etc.

Acme Industrial Co.
Adlings, Inc.
Aidlin Automation
Amer. Mach. & Foundry
Automatic Methods
Automation Management
Barnes Dev. Co.
Barnes Engrg. Co.
Bristol Co.
Burndy Engrg. Co.
Cincinnati Time Rec. Co.
Clevite Research Center
Davenport Mfg.
Design Tool Corp.
Engrg. & Research Corp.
Farrand Optical
Federal Tool Engrg.
Fenway Machine Co.
Hillyer Instr. Co.
Industrial Instrs.
Internatl. Business Mach.
Lake Erie Electric
Optimized Devices
Reeves Instr. Corp.
Sheffield Corp.
Taft-Peirce Mfg. Co.
United Shoe Mach.

MACHINES, Center Lapping

A & M Tool & Die
Ex-Cell-O Corp.
Hirschmann Co.
Scherr Co.
Taper Micrometer Corp.
Willey's Carbide Tool

MACHINES, Coil Winding

A & M Tool & Die
Amer. Mach. & Foundry
Arnold Magnetics Co.
Brit. Industries Corp.
Coil Winding Equipt. Co.
Control Data Corp.
Cosa Corp.
Crown Indust. Prod. Co.
Devel. Engrg. Co.
Dittmore & Freimuth
Electro Devices (Mass.)
Gallien, R. P.
General Winding Co.
Giannini & Co.
Globe Tool & Engrg.
Hamilton Tool Co.
Harder Co., Donald C.
Kahle Engrg. Co.
Mico Instr. Co.
South Bend Lathe Works
Specialties, Inc.
Stanat Mfg.
Switchcraft, Inc.
Van Dyke Instruments

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Sheffield Corp.
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Mico Instr. Co.
Porter Cable Mach.

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Gallien, R. P.
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Bausch & Lomb
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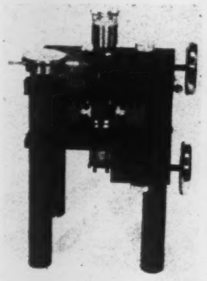

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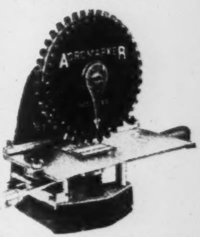

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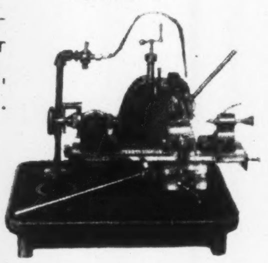

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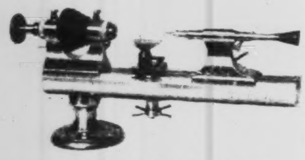

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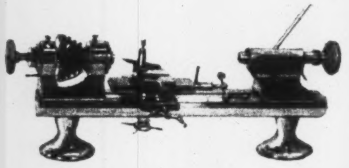

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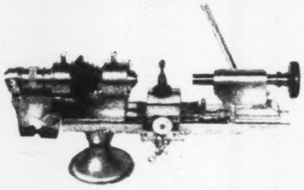

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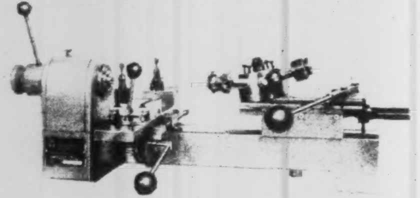

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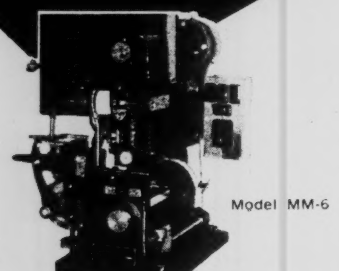

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Toledo Scale Co.
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MACHINES, Jewelers' Lathes etc., see Jewelers' Lathes

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Litton Industries
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Dixon, Inc.
DoAll Co.
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Elgin Tool Works
Ferner Co.
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Gallien, R. P.
Gisholt Machine Co.
Greaves Mach. Tool Co.
Guthery Mach. Tool Co.
Hardinge Bros.
Heitz, Inc., Karl
Hirschmann Co.
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Koehler Instr. Co.
Levin & Son
Litton Industries
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Sheldon Mach. Co.
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Blanchard Machine Co.
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Scherr Co.
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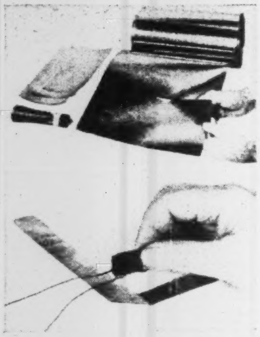

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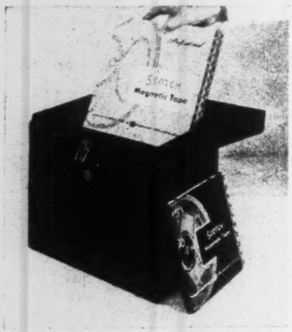

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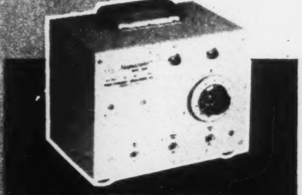

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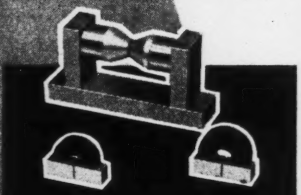

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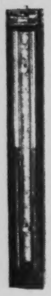

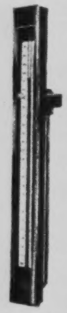

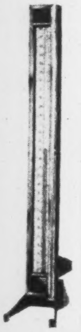

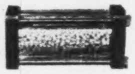

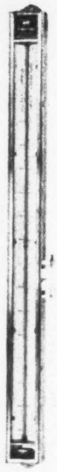

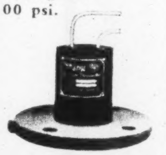

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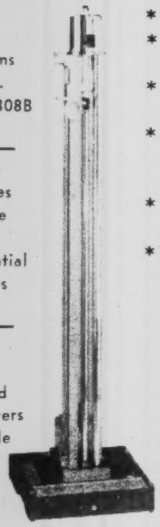

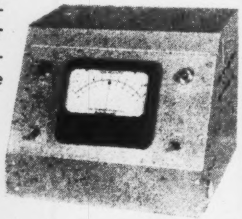

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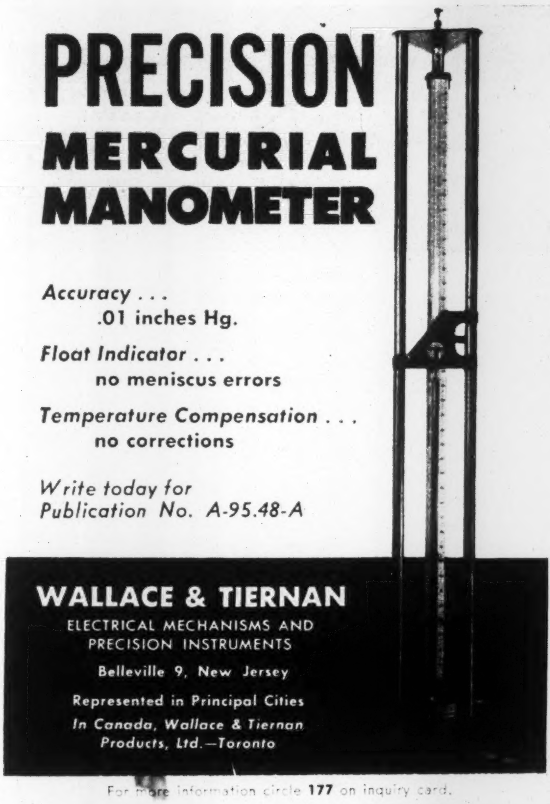

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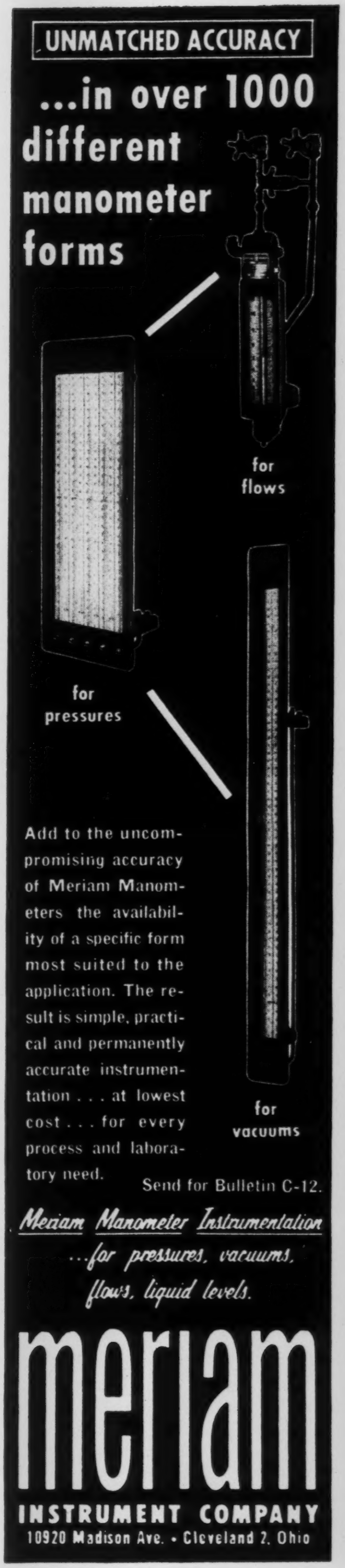

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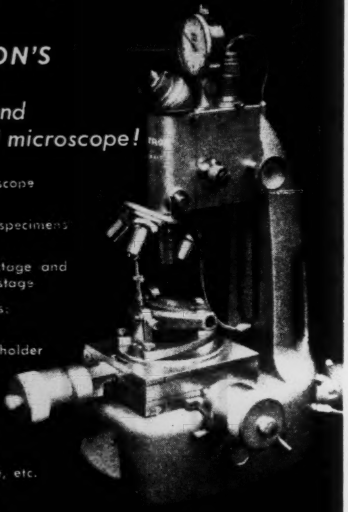

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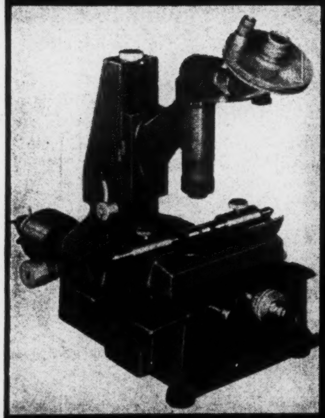

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MILK TEST INSTRUMENTS

Amer. Optical
Beede Electcl. Insts.
Buffalo Meter Co.
Central Scientific
Fisher Scientific
G. M. Mfg. Co.
Grain Lab. Equip.
Greiner, Emil
Griebel Co.
Insco Company
Kimble Glass
Koehler Instr. Co.
La Motte Chem. Prod
Lumenite Electronic
Munsell Color Co
Natl. Appliance Co.
Owens-Illinois
Photovolt Corp.
Rutteo Mfg. Co.
Scientific Glass App.
Standard Elect. Time
Testrite Instr. Co.
Weksler Thermometer
Weston Electcl. Instr.

MILLIAMMETERS, see Ammeters, Milli

MILLIOHMETERS, see Resistance Indicators, Milliohm

MILLIVOLTMETERS, see Voltmeters, Milli

MINE GAS INDICATORS, see Gas Analyzers, also Gas Alarms

MIRRORS (see also Optical Parts)

Acme Industrial
Alfa Amer. Corp.
Amer. Lens
Amer. Optical Co.
Bache & Company, Semon
Bausch & Lomb
Boehmke Optical
Bray Optical
Bronoptics Co.
Buhl Optical
Bushnell Optical
Cal-Astro Optical Labs
Clark & Sons
Commercial Optical
Curtis Labs.
Dearborn Scientific
Dixon, Inc.
E & W Optical
Eder Instr. Co.
Edmund Scientific
Edna Lite Co.
Esco Prods. Co.
Farrand Optical
Fecker, Inc.
Fish-Schurman
Fosdick Glass Co.
Gaertner Scientific
Garlynn Engrg. Co.
Genl. Scient. Corp.
Georator Corp.
Glass Speicalty
Glendale Optical
Gordon Enterprises
Gurley, W. & L. E.
Hathaway Instr. Co.
Hayward Scient. Glass
Helio Instr. Co.
Henson Co.
Herron Optical
Internat. Optical
Jerguson Gage
Jones Optical Wks
Keim Precision Mirrors
Keuffel & Esser
Kollmorgen Optical
Laboratory Optical
Laboratory Specialties
Lynn, Robert M.
National Research
Optical Coating
Optical Film Engrg.
Optron Lab.
Pacific Optical
Pacific Univ. Prods.
Palos Optical Co.
Pan-technics, Ltd.
Pancro Mirrors, Inc.
Penn Optical & Instr.
Perkin-Elmer
Process & Instruments
Regal Instr. Co.
Robinson Optical
Schneider-Cogswell
Simpson Optical
Starr Corp.
Texas Insts., Inc.
Tiffen Marketing
Tinsley Labs.
Unertl Optical
Univis Lens Co.
Warren-Knight
Zenith Optical Lab.
Zoomar Corp.

MIRRORS, Front Surface

Amer. Optical
Bache & Company, Semon
Baird-Atomic
Bausch & Lomb
Behm & Sons
Bray Optical
Bronoptics Co.
Buhl Optical
Bushnell Optical
Cal-Astro Optical Labs.
Commercial Optical
Curtiss Labs. Inc.
Davidson Mfg.
E & W Optical Co.
Eastman Kodak
Edmund Scientific
Engis Equipt. Co.
Enteco Industries
Esco Prods. Co.
Evap. Metal Films
Farrand Optical
Fecker, Inc.
Fish-Schurman
Gaertner Scientific
Garlynn Engrg. Co
Genl. Scient. Corp.
Glass Specialty
Gordon Enterprises
Helio Instr. Co.
Henson, Fred C.
International Optical
Jaegers, A.
Jones Optical Works
Keim Prec. Mirrors
Kinney Mfg. Div.
Lab. Optical
Leroy Clausing Co.
Lynn, Robert M.
Metavac, Inc.
Micromat Co.
Nikon, Inc.
Northrop Anaheim
Optical Coating Lab.
Optical Film Engrg.
Optron Lab.
Pacific Optical
Pacific Transducer
Pacific Univ. Prods.
Palos Optical
Pan-Technics, Ltd.
Pancro Mirrors, Inc.
Perkin-Elmer Corp.
Phoenix Prec. Instr.
Plummer & Kershaw
Precision Products
Ransom Labs.
Regal Instr. Co
Renick Co., L. C.
Schneider-Cogswell
Schutte Optical
Simpson Optical
Starr Corp.
Texas Insts., Inc.
Tiffen Marketing
Tinsley Labs.
Unertl Optical
United Optical
Zenith Optical Lab.
Zenith Optical Co.
Zoomar Corp.

MIRRORS, Heat Reflecting
Pancro Mirrors

MIRRORS, Instrument

Acme Scientific
Amer. Optical
Askania-Werke A. G.
Bache & Company, Semon
Baird-Atomic
Bausch & Lomb
Behm & Sons
Boehmke Optical
Bray Optical
Bronoptics Co.
Buhl Optical
Cal-Astro Optical Labs
Cohn Corp., Sigmund
Commercial Optical
Corning Glass Wks.
Curtis Labs., Inc.
Davidson Mfg.
Dearborn Glass Co.
Dearborn Scientific
E & W Optical Co.
Edin Co.
Edmund Scientific
Edna Lite Co.
Engis Equipt. Co
Esco Prods. Co.
Evap. Metal Films
Farrand Optical
Fecker, Inc.
Fish-Schurman
Gaertner Scientific
Garlynn Engrg. Co.
Gordon Enterprises
GE
Glass Specialty
Goerz Amer. Optical
Gurley, W. & L. E.
Hanovia Chem. Mfg.
Hathaway Instr. Co.
Henson, Fred C.
Herron Optical
Internat. Optical
Jaegers, A.
Jones Optical Works
Keim Prec. Mirrors
Koehler Instr. Co
Kollmorgen Optical
Lab. Optical
Leroy Clausing Co.
Lynn, Robert M.
Marine Compass Co.
Metavac, Inc.
Meyer-Opticraft
Micromat Co.
Miller Instruments
National Research Corp.
Northrop Anaheim
Optical Coating Lab.
Optical Film Engrg.
Optron Lab.
Pacific Optical
Pacific Univ. Prods.
Palos Optical
Pancro Mirrors, Inc.
Penn Opt. & Instr. Co
Perkin-Elmer
Practo Photo
Precision Products
Ransom Labs., John H.
Regal Instr. Co.
Schneider-Cogswell
Simpson Optical
Starr Corp.
Texas Insts., Inc.
Tiffen Marketing
Tinsley Labs.
Unertl Optical
Univis Lens Co.
Wilder, Inc.
Zenith Optical Co.
Zenith Optical Lab.

MIRRORS, Semi-Transparent

Bache & Company, Semon
Baird-Atomic
Bausch & Lomb
Behm & Sons
Boehmke Optical
Bray Optical
Bronoptics Co.
Buhl Optical
Cal-Astro Optical Labs
Commercial Optical
Curtis Labs. Inc.
Davidson Mfg.
E & W Optical
Eastman Kodak
Edmund Scientific
Edna Lite Co.
Esco Products
Evap. Metal Films
Farrand Optical
Fecker Inc.
Fish-Schurman
Gaertner Scientific
Garlynn Engrg. Co.
Genl. Scient. Corp.
Gordon Enterprises
Green Rectifier Co
Houston Technical Labs
International Optical
Jaegers, A.
Jones Optical Works
Keim Prec. Mirrors
Kinney Mfg. Div.
Kollmorgen Optical
Lab. Optical
Leroy Clausing Co.
Lynn, Robert M.
Metavac, Inc.
Micromat Inc
Miller Instruments
Nikon, Inc.
Northrop Anaheim
Optical Coating Lab
Optical Film Engrg. Co
Optron Lab.
Pacific Optical
Pacific Univ. Prods
Palos Optical
Pan-Technics, Ltd.
Pancro Mirrors, Inc
Perkin-Elmer
Phoenix Prec. Icst.
Practo Photo Acces.
Prec. Prods. Co.
Regal Instr. Co.
Schneider-Cogswell
Simpson Optical
Starr Corp.
Texas Insts., Inc.
Tiffen Marketing
Tinsley Labs.
Unertl Optical
Zenith Optical Co
Zenith Optical Lab.

MODULATION INDICATORS

ARF Products
Air-O-Tronics
Amer. Electroneering
Baird-Atomic
Cole Instr. Labs.
Computer Co. of Amer.
Donner Scientific
Electronic Devel. Lab.
Farnsworth Electronics
Federal Telephone & Radio
GE
General Radio Co.
Industrial Control
Kay Electric Co.
Knights Co.
Lampkin Labs., Inc.
Marconi Instruments
Marion Electcl. Meter
New London Instr.
Panoramic Radio Co.
RCA Div.
Radio City Products
Sylvania Elect. Prods.
Virginia Electronics
Voltron Products
Weston Electcl. Instr.

MODULATORS, Magnetic

Acromag, Inc.
Airpax Prods. Co.
Airtron, Inc.
Avion Div.
Brit. Electronic Sales
Clark Controller
Daven Co.
Filtron Co., Inc.
General Magnetics
Helipot Div.
Hycor Div.
Industrial Control
Levinthal Electron. Prods.
Magnetic Amplifiers
Magnetic Research Corp.
Minneapolis-Honeywell Boston Div.
Potter Instr. Co.
Servo Corp. of America
Std. Electronic Res.
Stavid Engrg., Inc.
Sylvania Elect. Prods
Texas Div., Brush
Timely Insts. & Conts.
Torwico Elects., Inc
Transistor Applications
Trerice Electronics, Inc
Vari-L Co.
Wheelco Div.

MOISTURE CONTROLLERS, see Humidity

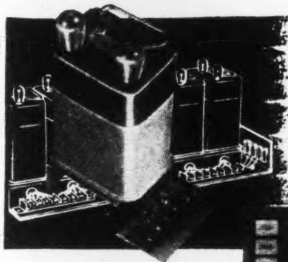
MOISTURE INDICATORS (see also Humidity also Environmental Test)

Brabender Instrs.
Cambridge Instr. Co.
Delmhorst Instr. Co.
Dittert Co.
Electronic Prods. Co
Ferner Co.
GE
H & H Thermostats
Hart Moisture Gage
King Engrg. Co.
Marconi Instruments
Measurements Corp.
Moisture Register Co.
Precision Scientific
Seedburo Equipt. Co
Serdex, Inc.
Sherron Metallic
Tri-Dex Electronics
Weston Electcl. Instr.

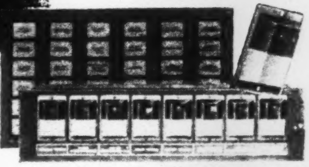
MOLECULAR STILLS, see Distillation Apparatus

MOLDERS OF PLASTICS

Aero Supply Mfg. Co
Aerolite Electronics
Allegheny Plastics
Alden Products
Amer. Hard Rubber Co
Amer. Phenolic Corp
Ampco Mfg. Co.
Armstrong Cork
Auburn Button Wks
Barber-Colman
Bel-Art Products
Blossom Mfg. Co.
Boonton Molding Co
Breeze Corp.
Buchanan Elec. Prods
Canfield Rubber Co
Carbide & Carbon
Carroll Co., J. B.
Chicago Molded Prods
Consol. Mld. Prods.
Continental-Diamond Fibre
Crane Packing Co.
Dimco-Gray
Dynakon Corp.
Eastern Prec. Resistors
Eby, Inc., Hugh H.
Edroy Products
Electro Devel. Co.
Electronic Mechanics
Erie Resistor
Felsenthal & Sons
Formica Co.
Garde Mfg.
Garlock Packing
GE
General Industries Co.
Gits Molding Corp.
Grammes & Sons
Grayhill
Gries Reproducer
Grigoleit Co.
Imperial Molded Prods
Inlaid Optical
Instrument Corp.
Instrument Tool & Engrg
Joy Mfg. Co.
Keller Products
Kellogg Switchboard
Kulka Elect. Mfg. Co.
Lab-Tronics
Lancaster Glass
Luzerne Rubber
Millen Mfg. Co.
Molded Insulation Co.
N. Y. Scient. Supply
Raybestos-Manhattan
Regal Plastic Co.
Remler Co.
Richardson Co.
Rogan Bros.
Sillcocks-Miller
Slip Ring Co. of Amer.
Specialty Insuln. Mfg.
Stanley Works
Stokes Molded Prods.
Surprenant Mfg. Co.
Sylvania Elect. Prods
Taylor Mfg. Co.
Telex, Inc.
Tube Turns Plastics
Tungsten Contact Mfg
U. S. Gasket Co.
Viking Indus., Inc.
Waterbury Cos.
Werner Co.
White Dental Mfg.



New
TEL-ALARM
"Unitized"
ANNUNCIATOR
SYSTEM



- WIDE VARIETY OF CIRCUIT ARRANGEMENTS TO MEET ANY NEED
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- STANDARDIZED FOR EASY USE—LOWER COST

HERE is the first "unitized" annunciator. Tel-Alarm incorporates a basic relay unit with many different circuit arrangements available. Tel-Alarm is completely standardized for low cost and easy maintenance.

Tel-Alarm is corrosion proof, hermetically sealed and meets any Class 1, Division 2 application. The units are completely self-contained—no complicated wiring—and merely plug into a standard Tel-Alarm chassis. Simple and easy to install.

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Contains complete circuit sequence diagrams, full range of models for every need.

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4332 North Western Ave., Chicago, Ill.
"Protecting America's Industry"

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MOLDS for PLASTIC and RUBBER

Acme Scientific
A & M Tool & Die Co
Amer. Hard Rubber Co
Canfield Rubber Co.
Chicago Molded Prods.
Eastern Prec. Resistors
Electro Devel. Co.
Gorton Machine Co.
Grigoleit Co.
Instrument Tool & Engrg
Jessop Steel
Joy Mfg
Lancaster Glass
Molded Insulation Co
Remler Co.
Res. Appliance Co.
Richardson Co.
Rogan Bros.
Scheidl Mfg. Co
Schmidt, Inc., Geo. T
Slip Ring Co. of Amer.
Specialty Insuln. Mfg.
Sylvania Elect. Prods.
Taylor Mfg. Co.
Tungsten Contact Mfg
Viking Indus., Inc.
Waterbury Cos
Western Supplies Co

MOLYBDENUM

Amer. Electro Metal
Amer. Silver Co.
Anti-Corrosive Mtl. Prods
Baker Chem. Co.
Belmont Smg. & Refg.
Cleveland Tungsten
Cohn Corp., Sigmund
DoAll Co.
Electronic Parts Mfg
Fansteel Metallurgical
GE, Lamp Wire & Phos
Kemet Labs.
Mallory & Co., P. R.
Minn.-Honeywell, Indus.
North Amer. Phillips
Radial Metal Prod.
Secon Metals Corp
Stupakoff Div.
Sylvania Elect. Prods.
Westinghouse Electric
Wilson Co., H. A.

MONEL METAL PARTS

Aero Supply Mfg.
Albany Prods. Co.
Anti-Corrosive Mtl. Prods
Autoscrew Co.
Conant Bros. Co
Crawford Fitting Co
Deringer Metallurgical
Dragon Engrg. Co
Driver-Harris
Falstrom Co.
Gervos Instruments
Grammes & Sons
Hartford Mach. Screw
Instrument Parts Corp
Koehler Instr. Co.
Lewyt Corp.
Marble-Card Electric
Newark Wire Cloth
Radial Metal Prod
Rochester Mach. Screw
Schnitzer Alloy Prods
Star Stainless Screw
Staver Co., Inc.
Sylvania Elect. Prods
Tinnerman Products
U. S. Indesble. Gasket
Webber Metal Works
Western Auto. Mach. Sc

MONITORS, including Annunciators

Airborne Instruments
Auth Elect. Spec.
Authorized Mfrs. Service
Autocall Co.
Autom. Control Co.
Automatic Electric
Automatic Elect. Mfg
Autom. Timing & Control
Bailey Meter Co
Beck & Co.
Bendix, Pacific
Betts & Betts
Biddle Co., James G
Bogue Elect. Mfg
Bristol Co
Browning Lab.
Bullard Co.
Cal-Ohm Labs
Cal-Tronics Corp
Cannon Electric
Century Electronics
Cincinnati Time Rec
Colortone Electronics
Con Ray Corp.
Cook Electric
Cooper Co., Clark
Cunningham, Son & Co., J.
Daven Co
De-Tec-Tronic Corp
Eastern Industries
Edison, Inc., Thomas A
Edwards, L. V.
Elect. Indicator Corp
Electro Devices (St. Louis)
Electro Devices, Inc
Erie Instrumentation
Falcon Alarm Co
Fielden Instr. Div
Fisher & Porter Co
Foxboro Co.
GE, Apparatus Sales
Guardian Elect. Mfg. Co
Haydon Co., A. W.
Henschel Corp.
Holtzer-Cabot
Industrial Timer Corp.
Instruments Inc.
Internat. Bus. Mach.
International Res. & Dev
Jaidinger Mfg.
Jarco Services
Kirkland Co
Koehler Instr. Co.
Kybernetes Corp
Lampkin Labs.
Larson Instrument
Leeds & Northrup
Leslie Co
Leupold & Stevens
Lumenite Electronic
Magnecord, Inc.
Magnetrol, Inc.
Martin-Hubbard
Mason-Neilan Div.
Mine Safety Appliances
Montgomery Mfg. Co
National Time & Signal
NRD Instr. Co
Nelson Electric Mfg
Northeast Electronics
Norwood Controls
Nuclear Electronics
Nuclear Research
Panellit, Inc.
Phoenix Prec. Instr.
Photoswitch Div.
Production Instr. Co
Radiation Counter Labs
Raytheon Mfg. Co.
Riggs Nucleonics
Rochester Mfg. Co.
Scam Instr. Corp.
Servo Corp. of Amer.
Signal Engrg. & Mfg.
Science Engrg. Co.
Standard Elect. Time
Syncro-Start Prods.
Taller & Cooper
Tele-Dynamics
Thermo-Electric Co., Inc.
Thompson Clock
Tigerman Engrg. Co.
Tracerlab, Inc.
Union Switch & Signal
Victoreen Instr. Co
Viking Instruments
Wallace & Tiernan
Warren Telechron
Waterman Prod. Co., Inc.

MONITORS, Radioactivity, see Radiation Alarms, also Radioactivity

MONOCHROMATIC LIGHT SOURCES, see Light Sources, Monochromatic

MONOCHROMATORS, including Infrared

Applied Physics Corp
Applied Research Labs
Baird-Atomic
Bausch & Lomb
Beckman Div.
Biddle Co., James G.
Cambridge Thermionic
Ercona Corp.
Farrand Optical
Fecker, Inc.
Ferner Co.
Gaertner Scientific
GE, X-Ray Dept
Green Rectifier Co
Infrared Industries
Instrument Devel. Labs
International Devel. Co
Jarrell-Ash
Kauffman-Lattimer
Lab. Optical
Leeds & Northrup
Leitz, Inc.
Los Angeles Scientific
Opplem Co.
Perkin-Elmer
Phoenix Prec. Inst
Photovolt Corp
Process & Instruments
Rudolph & Sons
Servo Corp. of Amer.
Texas Insts., Inc.
Zeiss, Inc., Carl

MOTION INDICATORS and/or RECORDERS, see Displacement, also Speed, also Accelerometers

MOTOR CONTROLLERS & REGULATORS

Allen Bradley Co
Amer. Kloeckner-Moeller
Assembly Products, Inc.
Autm. Switch Co.
Avion Div.
B/W Controller Corp
Boehm Co., R. A.
C. G. S. Labs.
Conofow Corp.
Curtiss-Wright Corp.
Cutler-Hammer Inc
Dales Co., Franklin
Foster Engrg. Co.
Furnas Electrical Co
GE, Apparatus Sales
GE Gen. Purp. Contr
GE, Specialty Contrls
General Radio Co
Green Rectifier Co
Hanson-Gorrill-Brian
Industrial Instrs.
Johnson Engineering
Keckley Co
Leach Corp
Magnetic Amplifiers
Minarik Electric Co
Motor Sales Div., Fasco
Nelson Electric Mfg
Ohmite Mfg. Co.
Opad Electric Co
Power Supplies, Inc
R. K. L. Valve & Mfg
Ribble Engrg. Co
Servo-Tek Products
Superior Electric
Technical App. Builders
Trerice Co., H. O.
Wac Line, Inc
Ward Leonard Elect
Warren Mfg. Co
Westinghouse Electric

MOTOR SPEED Controllers, see Motor Controllers

MOTOR STARTERS, see Starters, Motor

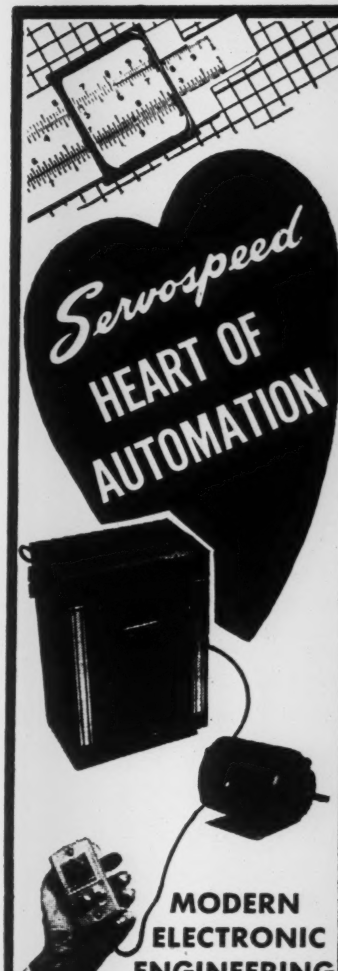
MOTOR TESTERS

Automatic Devel. Co

MOTORS, Clock, see Clockworks

MOTORS, Fractional Horsepower, including Reversible and/or Synchronous

Advanced Products Co.
Airborne Access. Corp
AiResearch Mfg
Air-Marine Motors
Allard Instr. Corp.
Alliance Mfg. Co.
Amer. Electric Motor
Amer. Electronics
Amglo Corp.
Ashland Elect. Prods. Co
Askania-Werke, A. G.
Barber-Colman
Bekey Electric
Bendix, Eclipse-Pioneer
Bendix, Red Bank Div
Bodine Electric
Borg Equipt. Div
Bristol Motor Div.
Burke Electric
Burton Mfg.
Cardwell Mfg
Carter Motor Co
Cedar Engrg., Inc.
Century Electric
Chatillon & Sons
Clifton Prec. Prods
Control Data Corp.
Controls Co. of Amer.
Cramer Controls Corp
Cyclohm Motor Corp
Dale Prods., Inc.
Dalmotor Co
Dejur-Amsco
Delco Appliance Div
Diehl Mfg. Co
Doerr Elect. Corp
Eastern Air Devices
Edison, Inc., Thomas A
Elcor, Inc.
Electric Indicator Co
Elec. Motors & Specialties
Electric Spec. Co
Electric Switch Corp
Electro Engrg. Prods.



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Modern industrial electronic engineering has been coordinated with electric motor design to provide a versatile means for obtaining the full possible advantage of speed control in DC motors while operated from the regular alternating current power line. Grid controlled "Thyratron" tubes are utilized for power controlled stepless variation to supply motor armature power. Patented feedback, or "Servo" circuits provide constant torque capability over wide speed ranges of as high as 60 to 1 in some models and a minimum of 20 to 1 in others.

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DIV. of ELECTRO DEVICES, Inc.
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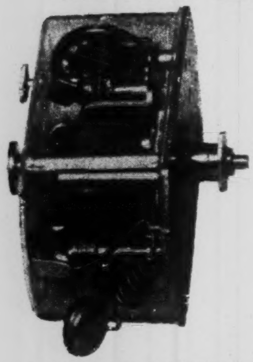
THE NEW ELIX



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- OPERATES ON A FLASHLIGHT BATTERY FOR MANY MONTHS.
- UNSURPASSED FOR UNATTENDED RECORDING DEVICES.
- USED BY GOVT. AGENCIES.
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- SPECIAL DESIGNS FOR SMALL-RUN PRODUCTION CONSIDERED.

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Electro Mechano Co.
Electronic Communication
El Ray Motor Co.
Elsbert Mfg.
Esterline-Angus
Fairbanks, Morse & Co.
Fairchild Camera
Fairchild Industries Div.
Fasco Industries, Inc.
Fidelity Electric
Ford Instr. Co.
G-M Labs.
Gallien, R. P.
GE, Apparatus Sales
GE Clock & Timer Dept.
General Controls
Genl. Industries
General Motors, Delco Div.
Giannini & Co.
Gleason-Avery
Globe Industries
Hagen Mfg. Co.
Hansen Mfg. Co.
Hathaway Instr. Co.
Haydon Co., A. W.
Heinze Electric
Heller Co.
Holtzer-Cabot
Howard Industries
Howell Elect. Motors
Hubbell Metals, Inc.
Hupp Electronics
Hurst Tool & Mfg.
Induction Motors Corp.
Instrument Motors Co.
Intelex Systems
International Register
Jack Scient. Instr. Co., Bill
Jadow Inc.
Janette Mfg.
Kearfott Co.
Kendrick & Davis
Kollsman Instr. Corp.
L & R Mfg. Co.
Lafayette Instr. Co.
Lamb Electric
Landis & Gyr
Lear, Inc.
Leland Electric
Luther Mfg. Co.
Marble-Card
Marco Industries
Master Electric
Merkle-Korff
Minneapolis-Honeywell
  Boston Div.
Mission-Western
Modern Tech. Supp.
Motordyne Inc.
Natl. Pneumatic Co.
National Time & Signal
New Haven Clock
Newall Mfg. Co.
Norcross Corp.
Ohio Elect. Mfg.
Oster Mfg. Co.
Peerless Electric
Pesco Products
Precise Prods. Co.

Precision Mfg. Co.
Raytheon Mfg. Co.
Redmond Co.
Reeves Instr. Co.
Reynolds Electric
Rotating Components
Robbins & Meyers
Sangamo Electric
Scovill Mfg.
Scruggs Co.
Servomechanisms, Inc.
Servo-Tek Products
Siemon Engrg. Co.
Signal Elect. Mfg.
Small Motors, Inc.
Specialty Battery Co.
Speedway Mfg. Co.
Sperry Gyroscope
Sid. Dayton Corp.
Summers Gyroscope
Syntorque, Inc.
Taller & Cooper, Inc.
Task Corp.
Technical Devel. Corp.
Thermador Electcl. Mfg.
Seth Thomas Clocks
Times Facsimile Corp.
U. S. Electcl. Motors
WacLine, Inc.
Wagner Elect. Corp.
Western Gear Corp.
Westinghouse Electric

MOTORS, Geared

Acro Mfg. Co.
Advanced Products Co.
Airborne Access. Corp.
Air-Marine Motors Inc.
Amer. Electronics
Amglo Corp.
Ashland Elect. Prods.
Barber-Colman
Bekey Electric
Bendix, Eclipse-Pioneer
Bodine Electric
Borg Equipt. Div.
Brevel Prods.
Cramer Controls Corp
Cyclohm Div.
Dalmotor Co.
Diehl Mfg.
Eastern Air Devices
Electomic Mechanisms
Electro Engrg. Products
Electronic Communication
El Ray Motor Co.
Fairbanks Morse & Co.
Fairchild Industries
Feedback Controls
Ford Instr. Co.
GE, Apparatus Sales
Genl. Industries
Gleason-Avery
Globe Industries, Inc.
G. M. Labs., Inc.
Hansen Mfg. Co.
Haydon Co., A. W.
Haydon Mfg. Co.

Heinze Electric
Heller Co., G. K.
Holtzer-Cabot
Howard Industries
Hurst Tool & Mfg.
Induction Motors Corp.
Instrument Motors
Kearfott Co.
Kollsman Instr. Co.
Lamb Electric
Lear, Inc.
Lectronic Research Labs.
Marble-Card
Master Electric
Merkle-Korff
Minneapolis-Honeywell
  Boston Div.
Motordyne Inc.
Natl. Pneumatic Co.
New England Gear Wks.
Oster Mfg. Co., John
Peerless Electric
Pesco Products
Phila. Gear Works, Inc.
Siemon Engrg. Co.
Reliance Elect. & Engrg.
Res. Appliance Co.
Robertshaw-Fulton
Robbins & Myers
Rotating Components
Sangamo Electric
Scruggs Co.
Servomechanisms, Inc.
Servo-Tek Products
Small Motors Inc.
Speedway Mfg.
Std. Dayton Corp.
Sterling Prec. Instr.
Summers Gryoscope
Systems Analyzer Corp.
Task Corp.
U. S. Electcl. Motors
WacLine, Inc.
Western Design & Mfg.
Western Gear Corp.
Westinghouse Electric

MOTORS, Laboratory

Ace Glass
Air-Marine Motors
Amglo Corp.
Arma Corp.
Ashland Elect. Prods.
Barber-Colman
Bekey Electric
Bodine Electric
Borg Equipt. Div.
Bogue Elect. Mfg.
Central Scientific
Cramer Controls Corp
Crow Electri-Craft
Cyclohm Div.
Dalmotor Co.
Eastern Air Devices
Elect. Indicator Co.
Electro-Mechanical Dev.
Fairbanks, Morse & Co.
Fasco Industries
Ford Instr. Co.
G.E. Apparatus Sales
GE Clock & Timer Dept.
Genisco, Inc.
Gleason-Avery
Greiner, Emil
Haydon Co., A. W.
Haydon Mfg. Co.
Heller Co., G. K.
Holtzer-Cabot
Howard Industries
Hurst Tool & Mfg.
Induction Motors Corp
Instr. Motors Co.
Kollsman Instr. Div.
L.A.B. Corp.
L. & R. Mfg. Co.
Lectronic Res. Labs.
Marco Industries
Master Electric
Merkle-Korff
Minneapolis-Honeywell
  Boston Div.
National Pneumatic Co
Oster Mfg.
Palo-Myers
Parr Instr. Co.
Peerless Electric
Res. Appliance Co.
Robbins & Myers
Rotating Components, Inc
Scruggs Co.
Servomechanisms, Inc.
Servo-Tek Prods.
Small Motors, Inc.
Summers Gyroscope
Syntorque, Inc.
Task Corp.
Thermador Electcl. Mfg.
Times Facsimile Corp.
WacLine, Inc.
Western Gear Corp.
Westinghouse Electric

MOTORS, Servo, see Servomotors

MOTORS, Step type, see Switches, Stepping

MOTORS, Synchronous

Advanced Products Co.
AiResearch Mfg.
Air-Marine Motors
Alina Corp.
Amer. Electronics Inc.
Amglo Corp.
Ashland Elect. Prods.
Barber-Colman
Beck Co.
Bendix, Eclipse-Pioneer
Bekey Electric
Bodine Electric
Bogue Elect. Mfg.
Borg Equipt. Div.
Bristol Motor Div.
Burke Electric
Clifton Prec. Prods.
Coleman Instruments
Columbia Elect. Mfg.
Cramer Controls Corp.
Cyclohm Div.
Dalmotor Co.

Eastern Air Devices
Electric Indicator Co.
Electyme Motor Prods.
Fairbanks, Morse & Co
Fairchild Camera
Fairchild Industries
Ford Instr. Co.
GM Labs.
General Control Co.
GE, Apparatus Sales
GE Clock & Timer Dept.
General Motors, Delco Div.
Genisco, Inc.
Giannini, G. M.
Gleason-Avery
Globe Industries, Inc.
Gordon Enterprises
Hagen Mfg. Co.
Hansen Mfg. Co.
Hathaway & Assocs
Haydon Co., A. W.
Haydon Mfg. Co.
Holtzer-Cabot
Howard Industries
Hurst Tool & Mfg.
Induction Motors Corp
Instr. Mortors Co.
International Register
Inet-Palmer Div.
Kato Engrg.
Kearfott Co.
Kollsman Instr. Corp.
Kurman Elect. Corp.
Lamb Electric
Lear, Inc.
Lectronic Research Labs.
Luther Mfg. Co.
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Master Electric Co.
Merkle-Korff
Minneapolis-Honeywell
  Boston Div.
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Sangamo Electric
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Siemon Engrg. Co.
Small Motors, Inc.
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Sperry Gyroscope
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Syntorque, Inc.
Systems Analyzer Corp.
Task Corp.
Technical Electronics
Thermador Electrical
Times Facsimile Corp.
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Western Gear Corp.
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MOTORS, Torque

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Electric Spec. Co.
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Fasco Industries
Ford Instr. Co.
GE Apparatus Sales
General Industries
General Motors, Delco Div
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Globe Industries
Haydon Co., A. W.
Haydon Mfg. Co.
Holtzer-Cabot
Howard Industries
Hurst Tool & Mfg.
Induction Motors Corp
Instrument Motors
Johnson Engrg. Co.
Kato Engrg.
Kearfott Co., Inc
Kollsman Instr. Co
Lamb Electric
Lear, Inc.
Luther Mfg. Co.
Marble-Card
Master Electric
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National Pneumatic Co
New England Gear Wks
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Task Corp.
Technical Electronics Corp
Teller Co.
U. S. Electcl. Motors, Inc.
WacLine, Inc.

Western Design & Mfg.
Western Gear Corp.
Westinghouse Electric

MOTORS, Unidirectional, Small, AC

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Clifton Precision Prod.
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Curtiss-Wright Corp.
Cyclohm Div.
Dale Products
Dalmotor Corp.
Diehl Mfg. Co.
Doerr Electric
Eastern Air Devices
Elect. Indicator Co.
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Electric Spec. Co.
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Electronic Communication
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GE Clock & Timer Dept.
General Industries
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Marble-Card
Merkle-Korff
Minneapolis-Honeywell,
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Oster Mfg.
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NAVIGATION AIDS. Aircraft, including Loran, Ranges, Shoran, etc. (see also Compasses, also Radar, also Radiosondes)

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Belock Instr
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Genl. Prec. Lab.
Genisco Inc
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Gordon Enterprises
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Harvey-Well Electronics
Hastings-Raydist
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Helland Div.
Hickok Electcl. Instr
Humphrey Inc.
Hycon Electronics, Inc.
Impact Register
Instr. Associates
Inst. Corp. of Fla.
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Marine Compass Co.
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Maxson Corp.
Meyer-Opticraft
Mid-Century Instrumatic
Minneapolis-Honeywell, Boston Div.
Moisture Register Co.
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Negus, T. S. & J. D.
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Polarad Electronics
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RCA Div.
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Reeves Instr. Corp.
Ritchie & Son
Roller-Smith
Seismograph Serv. Corp
Servo Corp. of Amer.
Servomechanisms, Inc.
Servonic Instr. Inc.
Servonics, Inc.
Simmonds Access
Sperry Gyroscope
Square D Co.
Standard Prods. Inc.
Stavid Engrg., Inc.
Summers Gyroscope
Techno Instr. Co
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Unertl Optical
Union Switch & Signal
U. S. Gauge Div.
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Wakmann Watch Co
Wallace & Tiernan, Inc
Wang Labs
Warren-Knight
Weston Electcl. Instr
White Co., David
Wollensak Optical
Zeiss, Inc., Carl

NAVIGATION AIDS. Marine, including Loran, Shoran, etc. (see also Compasses, also Radar, also Radiosondes)

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Amer. Mach. & Foundry
Arma Div.
Autonetics Div.
Bendix Aviation Corp
Fed. Telephone & Radio
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Ford Instr. Co.
Hastings-Raydist
Inst. Corp. of Fla.
Kemlite Labs.
Munston Mfg. & Service
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Remler Company
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Arma Corp.
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Avion Div.
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Bausch & Lomb
Bendix, Eclipse-Pioneer
Bliss & Co.
Boes Co., W. W.
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Bronoptics Co.
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Lyon Co. W. D.
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Stafford Co.
Sterling Prec. Instr
Summers Gyroscope
Suverkrop Instruments
Testa Mfg. Co.
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Unertl Optical
Union Switch & Signal
Vectron, Inc.
Wakmann Watch Co
Warren-Knight
Weston Electcl. Instr
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Dusenbery Co.
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Gurley, W. & L. E
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Municipal Instr. Co
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NEEDLES, Gillmore

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Soiltest, Inc

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Central Scientific
Fisher Scientific
Humboldt Mfg. Co
Olsen Testing Machine
Riehle Div.
Soiltest, Inc.

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Fisher Scientific
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NESSLER TUBES, see Tubes, Nessler

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Dilectron Div.
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Empire State Labs.
Engineered Electronics
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F-R Machine
Farnsworth Electronics
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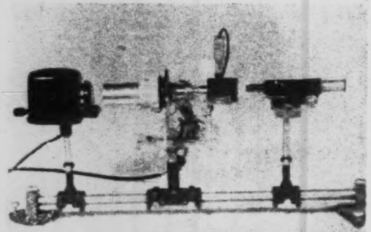

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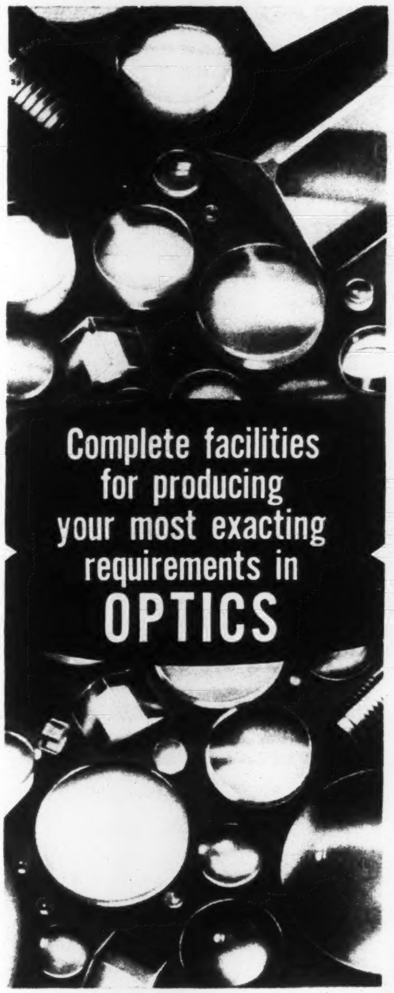

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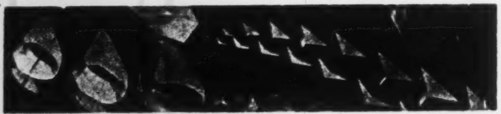

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Palos Optical
Portman Instr. Co
Potter Instr. Co
Prec. Thermom. & Insts
Rawson Elect. Instr.
Reeves Instr. Co.
Rutico, Inc.
Scovill Mfg. Co.
Servomechanisms, Inc
Shepard Labs
Sperry Gyroscope
Sterling Prec. Instr.
Stewart-Warner
Testa Mfg. Co.
Topp Industries
Vectron, Inc.
Wiancko Engrg. Co
Wild Heerbrugg
Zoomar Corp.

ORIFICE FITTINGS

Amer. Meter Co.
Bristol Co
Builders-Providence
Commercial Iron Works
Crawford Fitting Co.
Daniel Orifice
Foxboro Co.
Gar Prec. Parts, Inc
Hagan Chem. & Controls
Hays Corp.
Industrial Instr
Jessup Engrg. & Devel
Meriam Instr. Co.
Penn Insts. Div.
Republic Flow Meter
Robinson Orifice Fitting
Rockwell Mfg. Co.
Simplex Valve & Meter
Trimount Instr. Co.
Trinity Equipt. Co.
Turner Electric
Vickery Simms, Inc.

ORIFICE FLANGES

Amer. Meter Co.
B-I-F Industries
Barton Instr. Co.
Bristol Co.
Builders-Providence
Commercial Iron Wks
Conoflow Corp.
Daniel Orifice
Foxboro Co.
Hagan Chem. & Controls
Hays Corp.
Industrial Instr.
Meriam Instr. Co.
Penn Insts. Div.
Republic Flow Meters
Robinson Orifice Fittings
Rockwell Mfg. Co.
Simplex Valve & Meter
Taylor Forge & Pipe
Trimount Instr. Co.
Vickery-Simms, Inc.

ORIFICE METERS, see Flowmeters, Inferential

ORIFICE UNIONS

Bristol Co.
Daniel Orifice
Hagan Chem. & Controls
Hays Corp.
Industrial Instr. Corp.
Penn Insts. Div.
Robinson Orifice Fitting
Rockwell Mfg. Co.

ORIFICE PLATES

Amer. Meter Co.
B-I-F Industries
Bailey Meter Co
Barton Instr. Corp.
Bristol Co
Commercial Iron Works
Daniel Orifice
Foxboro Co.
Gar Prec. Parts, Inc.
Hagan Chem & Controls
Hays Corp.
Indust. Instr. Corp.
Jessup Engrg. & Devel. Co.
Johnson Service Co
Jones Optical
Meriam Instr. Co.
Minneapolis-Honeywell
Penn Insts. Div.
Republic Flow Meters
Robinson Orifice Fitting
Rockwell Mfg. Co
Sentinel Glass Co
Taylor Instr. Cos.
Trimount Instr. Co.
Vickery Simms, Inc

ORIFICES, Adjustable

Amer. Meter Co
Bailey Meter Co
Jordan Corp.
Scientific Instr. Co.
R. K. L. Valve Mfg. Co
Wallace & Tiernan

ORIFICES, Calibrated

Amer. Meter Co.
B-I-F Industries
Bristol Co.
Chemiquip Co.
Daniel Orifice
Gar Prec. Parts, Inc.
Hagan Chem. & Controls
Hays Corp.
King Engrg
Republic Flow Meters
Res. Appliance Co.
Robinson Orifice Fitting
Taylor Instr. Cos.
Testing Machines, Inc
Trimount Instr. Co
Wallace & Tiernan

ORIFICES, Sapphire

Bird & Co.
Duotone Co.
Elgin National Watch
Gallien, R. P.
Gatti, Aurele M.
Kastner, Charles
Keller, Jr. Hugo P.
Keller & Co., L. H.
Powers, Geo.
Steel Co., Herman D
Swiss Amer. Jewel-Bearings
Swiss Jewel Co.
Testing Machines, Inc
Vallorbs Jewel
Wallace & Tiernan
Worley Jewel Co.

"O" RINGS, see Seal Rings

ORSAT GAS APPARATUS, see Gas Analyzers, Orsat

ORTH-TOLIDIN TESTING OUTFIT

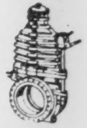
Hellige, Inc.
LaMotte Chem. Prods. Co.
Permutit Co.
Taylor & Co., W. A.
Wallace & Tiernan

OSCILLATORS, Audio-frequency

Adler Electronics
Air-O-Tronics
Amer. Electronics Labs
Amer. Time Prods.
Amplifier Co.
Audio Devel. Co
Bendix, Pacific
Berkeley Div.
Biddle Co., James G.
Boonton Radio
Brush Instruments
Bud Radio
Cal-Ohm Labs.

Commercial Orifice Fittings

TYPE CN—Chambered
2"-20"... 125-2500 lb. ASA



TYPE CS—Chambered
24" and larger...
125-600 lb. ASA

TYPE DSB—Deadline
2"-24"... 125-600 lb. ASA

TYPE DPL—Deadline
2"-24"... 600-2500 lb. ASA

TYPE D-600—Deadline
2"-6"... up to 600 lb. ASA

OUR 54th YEAR, SERVING INDUSTRY

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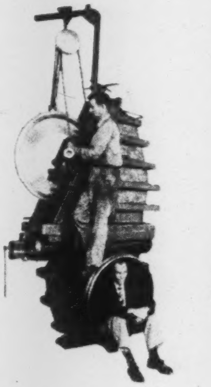
Commercial Iron Works
2424 Porter St.
Los Angeles 21, California
FOUNDERS, MACHINISTS, MANUFACTURERS

For more information circle **198** on inquiry card.

ROBINSON



ORIFICE FITTINGS offer 8 important advantages

34 inch type E

- Orifice always centered
- Orifice plates quickly and easily changed without interrupting flow
- Simplified construction
- Designed for convenient inspection
- Compact design saves space
- Provide better metering
- No by-pass valve to stick or leak
- No hazard—No gas loss

Get complete details
Write for Catalog 58

ROBINSON
Orifice Fitting Company
2830 Lugo St., Los Angeles 23, Calif.
Robinson Orifice Fitting Co. of Texas, Inc.
12233 Robin Blvd., P.O. Box 17216
Houston (31), Texas

For more information circle **199** on inquiry card.

Cambridge Instr. Co.
Cardinal Instrumentation
Central Scientific
Centralab Div.
Clippard Instr. Lab.
Clough-Brengle
Commun. Measmts. Lab.
Control Corp.
Cooper Dev. Corp.
Cubic Corp.
D & R Limited
Daystrom Instr.
Devtronics Inc.
Dittmore & Freimuth
Donner Scientific
DuMont Labs., Allen B.
Dymec, Inc.
Electro-Medical Lab.
Electro Prods. Labs.
Electro-Tech. Equipt.
Electronic Devel. Lab.
Electronic Instr. Co.
Electronic Measmts. Corp.
Electronic Mfg. Co.
Electronic Prods. Co.
Electronic Spec. Co.
El-Tronics, Inc.
Engineered Electronics
Engrg. Res. & Devel.
Farnsworth Electronics
Federal Telephone & Radio
Feller Engrg. Co.
Femco, Inc.
Ferris Instr. Corp.
Freed Transf. Co.
Furst Electronics
GE, Apparatus Sales
General Electronic
General Radio
Georator Corp.
Geotechnical Corp.
Hall Sonic Engrg. Co.
Hathaway Instr. Co.
Hewlett-Packard
Hickok Electcl. Instr.
Hoover Electronics
Hycon Electronics, Inc.
Indust. Test Equipt.
Interelectronics Corp.
Internatl. Electronic Res.
Inst. Corp. of Fla.
Islip Radio Mfg.
Jackson Electcl. Instr.
Kahn & Co.
Kay Development Co.
Kay Electric
Kinetic Instr. Co.
Krohn-Hite
Leeds & Northrup
Lewyt Metal Prods.
Ling Electronics
Madison Elect. Prods
Marconi Instruments
Measurements Corp.
Metrolog Corp.
Millen Mfg. Co.
Monroe Calc. Mach. Co.
Muirhead Instrument
Natl. Aircraft Corp.
Newark Electric Co.
Oltronix Co.
Polarad Electronics
Precise Devel. Co.
Prec. App. Co.
Probescope Co.
RCA Div.
Radex Corp.
Radio City Products
Radio Receptor Co.
Rahm Instr. Co.
Ramo-Wooldridge
Raytheon Mfg. Co.
Reiner Electronics
Riverbank Labs.
Scott, Inc., Hermon H.
Servo Corp. of Amer.
Sherron Metallic
Slaughter Co.
Southw. Indust. Electronic
Spivey, Inc., James S.
Sylvania Elect. Prods.
Tech. Material Co.
Tele-Dynamics, Inc.
Teletronics Lab., Inc.
Televiso Co.
Thordarson-Meissner
Times Facsimile Corp.
Transistor Applications
Transval Engrg. Corp.
Trimount Instr. Co.
Triplett Electcl. Instr.
Triumph Mfg. Co.
Ultradyne Engrg. Labs.
Vari-L Company, Inc.
Varo Mfg. Co.
Vectron, Inc.
Virginia Electronics
WacLine, Inc.
Walkirt Co.
Waterman Products
Weinschel Engrg. Co.
Wiancko Engrg. Co.

OSCILLATORS, Microwave

Airborne Instr.
Amerac, Inc.
Amer. Electroneering
Avion Div.
Bogart Mfg. Co.
C.G.S. Labs.
Clegg Labs., Inc.
Clough-Brengle
Cooper Dev. Corp.
Daystrom Inst.
Defiance Engrg. & Merwave
DuMont Labs., Allen B.
Dymec, Inc.
Electronic Spec. Co.
F. R. Machine Works
Farnsworth Electronics
Federal Telephone & Radio
General Communication
GE
General Radio Co.
Hewlett-Packard
Hycon Div.
Kahn & Co.
Kay Electric
Kearfott Co.
Lab. for Electronics
Lavoie Labs.
Manson Labs.
Marconi Instruments
Maxson Instr. Div.
Maxson Corp.
Menlo Park Engrg.
Narda Corp.
New London Instr. Co.
Polarad Electronics
Polytechnic Res. & Dev.
RCA Div.
Radio Receptor Co.
Ramo-Wooldridge
Raytheon Mfg.
Rollins Co.
Servo Corp. of Amer.
Sierra Electronic Corp.
Sperry Gyroscope
Std. Electronic Res.
Thordarson-Meissner
Transistor Applications
Varian Assocs.
Vectron, Inc.
Weinschel Engrg. Co.

OSCILLATORS, Radio-frequency

Acton Labs.
Adler Electronics
Aerovox Corp.
Airborne Istr. Laboratory
Alto Scientific
Amerac, Inc.
Amer. Electroneering
Audio-Tone Oscillator
Authorized Mfrs. Service
Avion Div.
BJ Electronics
Berkeley Div.
Bliley Electric
Boonton Electronics
Boonton Radio
Bradshaw Instruments
Bristol Co.
Bunnell & Co.
Canoga Corp.
Centralab Div.
Clarke Instr. Corp.
Clegg Labs., Inc.
Clippard Corp.
Clough-Brengle
Collins Radio
Communication Access
Crystal Research Labs
Cubic Corp.
Daystrom Instr.
Devtronics, Inc.
Diatron, Co.
Donner Scientific
DuMont Labs., Allen B.
Dymec, Inc.
Electro-Medical Lab.
Electronic Devel. Lab.
Electronic Instr. Co.
Electronic Mfg. Co.
Electronic Measmts. Corp.
El-Tronics, Inc.
Engrg. Enterprises
Engineering Res. & Devel.
ERDCO Engrg. Corp.
Farnsworth Electronics
Federal Telephone & Radio
Feller Engrg. Co.
Ferris Instr. Co.
Freed Transf. Co.
General Communication
GE, Electronics Div.
General Electronic
General Radio Co.
Georator Corp.
Geotechnical Corp.
Hall Sonic Engrg. Co.
Harvey Radio Labs.
Hewlett-Packard
Hickok Electcl. Instr. Co.
Hycon Eastern
Hycon Electronics, Inc.
Inst. Corp. of Fla.
Internat. Crystal Mfg. Co.
Islip Radio Mfg.
Jackson Co., Byron
Jackson Electcl. Instr. Co.
Kahn & Co.
Kay Electric
Lavoie Labs.
Lear, Inc.
Lewyt Metal Prods.
Ling Electronics
Lyman Electronics
Manson Labs.
Marconi Instruments
Maxson Instr. Div.
McFarlin Co.
Measurements Corp.
Menlo Park Engrg.
Mid-Century Instrumatic
Millen Mfg. Co.
Mohawk Electronic
Munston Mfg. & Service
Natl. Aircraft Corp.
New London Instr. Co.
Newark Electric Co.
Nuclear Electronics
P & H Electronics
Pacific Div.
Polarad Electronics
Polytechnic Res. & Dev.
Precise Devel. Corp.
Precision Apparatus Co.
Premier Res. Labs.
RCA Tube Div.
Radio City Prods. Co.
Radio Receptor Co.
Rahm Instruments
Raytheon Mfg. Co.
Reiner Electronics Co.
Riverbank Labs.
Servo Corp. of Amer.
Sherron Metallic
Sierra Electronic Corp.
Simpson Electric
Sperry Gyroscope
Spivey, Inc., James S.
Std. Electronic Res.
Sweets Co., Martin
Sylvania Elect. Prods.
Tech. Material Corp.
Technology Instr. Div.
Telechrome, Inc.
Teletronics Lab.
Telerviso Corp.
Telonic Industries
Thordarson-Meissner
Transistor Applications
Transval Engrg. Corp.
Triplett Electcl. Instr.
Triumph Mfg. Co.
Varian Associates
Vari-L Company, Inc.
Vectron, Inc.
Virginia Electronics
Walkirt Co.
Waterman Products
Wilmar Mfg. Co.

OSCILLATORS, Ultrasonic

Amer. Electronic Labs
Arenberg Ultrasonic Lab.
Atlantic Research
Branson Insts., Inc.
Brush Instruments
Cal-Ohm Labs.
Clough-Brengle
Corbett Science Labs
Devtronics, Inc.
Diatron Co.
Donner Scientific
DuMont Labs., Allen B.
Electronic Instrument
Engineering Res. & Devel.
Farnsworth Electronics
Freed Transf. Co.
GE
Gen. Prec. Lab.
General Radio
Hall Sonic Engrg. Co.
Hewlett-Packard
Hickok Elec. Instr.
Hycon Elect.
Indust. Test Equipt. Co.
Interelectronics Corp.
Kay Electric
Krohn-Hite
McKenna Labs.
Measurements Corp.
Oltronix Co.
Photocon Research
Radio Corp. of America
Radio Receptor Co.
Ransom Research
Raytheon Mfg.
Reed Research, Inc.
Riverbank Labs.
Scott Inc., Hermon H.
Sierra Electronic Corp.
Southw. Indust. Electronic
Spellman Television
Sperry Products
Sweets Co., Martin
Teletronics Lab.
Thordarson-Meissner
Transistor Applications
Virginia Electronics

OSCILLOGRAPHS, Cathode-ray, see Oscilloscopes

OSCILLOGRAPHS, Moving-conductor

Allied Products Div.
Baldwin-Lima-Hamilton
Brush Instruments
Cambridge Instr. Co.
Consol. Electrodynamics
Corbett Science Labs.
Edin Electronics
GE
Georator Corp.
Geotechnical Corp.
Hamilton Watch
Hathaway Instr. Co.
Heiland Div.
Midwestern Instruments
Opplem Co.
Sanborn Co.
Waterman Products

OSCILLOGRAPHS, Multi-element

Acton Labs.
Alden Products
Allied Products Div.
Allegany Instr. Co.
Baldwin-Lima-Hamilton
Brush Instruments
Cambridge Instr. Co.
Century Electronics
Coleman Instr. Co.
Consol. Electrodynamics
Corbett Science Labs.
Edin Electronics
Electro-Medical Lab.
Electro-Tech Equipt.
Epic, Inc.
Feiler Engrg. Co.
GE, Apparatus Sales
Genisco, Inc.
Georator Corp.
Geotechnical Corp.
Hamilton Watch
Hathaway Instr. Co.
Heiland Div.
Mid-Century Instr.
Houston Technical Labs
Midwestern Instruments
Offner Electronics, Inc.
Opplem Co.
Photron Instr. Co.
Pimex, Inc.
Sanborn Co.
Southw. Idust. Electronic
Techno Inst. Co.
Texas Div., Brush
Texas Insts., Inc.
Waldorf Inst. Co.
Waterman Products
Westinghouse Electric

OSCILLOGRAPHS, Piezo electric

Allied Products Div.
Baldwin-Lima-Hamilton
Brush Instruments
Cambridge Instr. Co.
Corbett Science Labs.
Electro-Medical Lab.
Georator Corp.
McFarlin Co.
Pimex, Inc.
Waterman Products

OSCILLOGRAPHS, Recording

Acton Labs.
Alden Products
Allegany Instrument Co.
Allied Prods. Div.
Amelco, Inc.
Baldwin-Lima-Hamilton
Beva Laboratory
Brush Instruments
Cambridge Instr. Co.
Central Research Labs
Century Elec. & Insts.
Coleman Instr. Co.
Consol. Electrodynamics
Corbett Science Labs
Du Mont Labs.
Edin Co.
Electro-Medical Labs
Electro-Products Lab.
Electronic Tube Corp.
Electro-Tech. Labs.
Epic, Inc.
GE, Apparatus Sales
General Radio Co.
Genisco, Inc.
Geotechnical Corp.
Grass Instr. Co.
Hathaway Instr. Co.
Heiland Division
Hycon Electronics, Inc.
Massa Div. of Cohu
Mid-Century Instrumatic
Midwestern Instruments
Offner Electronics
Opplem Co.
Photron Instr. Co.
Rahm Instruments
Reed Research, Inc.
Reeves Instr. Corp.
Sanborn Co.
Sound Apparatus Co.
Southw. Indust. Electronic
Stoelting Co., C. H.
Technology Instrument
Telecomputing Corp.
Texas Div., Brush
Texas Insts., Inc.
Triumph Mfg. Co.
Victor Lab.
Waldorf Inst. Co.
Waterman Products
Wollensak Optical

OSCILLOSCOPES

Aeroquip Corp.
Allied Radio Corp.
Amer. Electronic Labs.
Beta Electric Corp.
Beva Laboratory
Browning Labs.
Brush Instruments
Central Scientific
Clippard Instr. Lab.
Clough-Brengle
Computer Co. of Amer.
Cox Instruments
DuMont Labs., Allen B.
Eastern Prec. Resistor
Edgerton, Germeshausen
Electro-Mechanical Dev.
Electronic Devel. Lab.
Electronic Instr. Co.
Electronic Measmts. Corp.
Electronic Specialty Co.
Electronic Tube Corp.
El-Tronics, Inc.
Federal Telephone & Radio
Feiler Engrg. & Mfg.
Franklin Electronics
Furst Electronics
General Communication
GE, Electronics Div.
General Electronic
General Radio
Hall Sonic Engrg. Co.
Hamilton Watch Co.
Hewlett-Packard
Hickok Electcl. Instr.
Hycon Electronics, Inc.
I-L-S Instrument
Jackson Electcl. Instr.
Kingston Electronic
Lab. for Electronics
Lavoie Labs.
Millen Mfg. Co.
Munston Mfg. & Service
National Co.
Newark Electric Co.
Oltronix Co.
Philco Corp.
Photron Instr. Co.
Polarad Electronics
Precise Devel. Co.
Prec. App. Co.
Probescope Co.
Radio City Prods.
RCA Tube
Railway Communications
Reiner Electronics
Sherron Metallic Corp.
Simpson Electric
Southw. Indust. Electronic
Spencer-Kennedy
Spivey, Inc., James S.
Sun Electric Corp.
Supreme Inc.
Sylvan Electronic Labs
Sylvania Elect. Prods.
Techno Instr. Co.
Tektronix, Inc.
Telechrome, Inc.
Teletronics Labs., Inc.
Thordarson-Meissner
Trad Electronics Corp.
Triplett Electcl. Instr.
Triumph Mfg.
Ultrasonic Engrg. Co.
Universal Match
Vanguard Instr. Co.
Volkers & Schaffer
Waterman Products
Weston Instr.
Westronics, Inc.

OSMIUM

Amer. Platinum Wks.
Bishop & Co., J.
Brush Instruments
Duotone Co.
Secon Metals Corp.

OUTPUT METERS, see Sound Level, also Electrical Indicators

OVENS, Controlled Atmosphere

Amer. Gas Furnace Co.
Amer. Instr. Co.
Amer. Research Corp.
Auto Control Labs.
Blue M. Electric
Bush Assoc., G. F.
Cook Electric
Distillation Products
DoAll Co.
Electric Hotpack Co.
Gordon Co., Claud S.
Greiner, Emil
High Vacuum Equipt.
Instrumentation Assoc.
International Radiant
Julie Res. Labs
Kinney Mfg. Div.
Kahle Engrg. Co.
Kirk & Blum
L & L Mfg. Co.
Labline, Inc.
Laboratory Equipt. Corp.
McCoy Electronics
Modern Lab. Equipt. Co.
Natl. Appliance Co.
Pacific Scientific
Precision Scientific
Res. Appliance Co.
Rockwell Co., W. S.
Schaar & Co.
Sodemann Heat & Power
Stokes Corp., F. J.
Stromes Systems
Surface Combustion Corp.
Temp. Engrg. Inc.
Tenney Engrg., Inc.
U. S. Testing Co., Inc.
Valpey Crystal Corp.
Wakefield Industries
Warren Bros. Mfg. Co.

OVENS, Crystal Oscillator

Amer. Research Corp.
Bliley Electric
Blue M Electric
Cook Electric
Electric Hotpack Co.
Erwood, Inc.
Federal Telephone & Radio
Hupp Electronics
Knights Co.
Lavoie Labs.
Manson Labs.
McCoy Electronics
Premier Res. Labs.
RCA Div.
Robertshaw-Fulton
Telectronics Lab.
Temp. Engrg. Corp.
Tenney Engrg., Inc.
Valpey Crystal Corp.
Williamson Develop.

OVENS, Laboratory (see also Furnaces)

Ace Glass Co.
Aloe Co., A. S.
Amer. Gas Furnace Co.
Amer. Instr. Co.
American Research Corp.
Auto Control Labs.
Blue M Electric
Boekel & Co.
Brabender Instrs.
Braun Corp.
Burrell Corp.
Bush Assocs.
Central Scientific
Cook Electric
Dietert Co.
Electric Heat Control
Electro-Tech. Equipt.
ERDCO Engrg. Corp.
Electric Hotpack Co.
Falstrom Co.
Federal Telephone & Radio
Ferner Co.
Fischer Scientific
General Biological
Gordon Co., Claud S.
Grain Lab. Equipt.
Greiner, Emil
Grieve-Hendry
Humboldt Mfg.
Huppert Co.
Ipsen Industries
K. & H. Indust. Prods.
Kahle Engrg. Co.
Kearfott Co.
Kirk & Blum
L & L Mfg. Co.
Labline, Inc.
Lab. Equipt. Corp.
Link Aviation
Lucifer Electric
Magnetic Amplifiers
Metalab Div.
Modern Elect. Lab.
Modern Lab. Equipt. Co.
Natl. Appliance Co.
Pacific Scientific
Phipps & Bird
Physics Research
Precision Scientific
Res. Appliance Co.
Rockwell Co., W. S.
Sargent & Co.
Schaar & Company
Seedburo Equipt. Co.
Selas Corp. of Amer.
Sodemann Heat & Power
Soiltest, Inc.
Standard Science Supp.
Standard Scientific
Steiner-Ives
Stoelting Co.
Stromes Systems
Surface Combustion Corp.
Temp. Engrg. Corp.
Tenney Engrg. Inc.
Testing Machines, Inc.
Thermador Electcl. Mfg.
U. S. Testing Co.
Wakefield Industries
Welch Mfg. Co., W. M.
Wilkens-Anderson
Williams Apparatus, Inc.

OVENS, Precision Calibration

Aerotech Specialties
Amer. Instr. Co.
Amer. Mach. & Foundry
Blue M Electric
Bowser, Inc.
Central Scientific
Cook Electric
Cooley Elect. Mfg.
Despatch Oven Co.
Drying Systems, Inc.
Eclipse Fuel Engrg. Co.
Electric Hotpack Co.
Erwood, Inc.
Falstrom Co.
Fisher Scientific Co.
Gallien, R. P.
Greiner Co., Emil
Grieve-Hendry
Harshaw Scientific Div.
Hieatt Engrg. Co.
Huppert Co., K. H.
Kahle Engrg. Co.
Kirk & Blum
Knights Co., James
L & L Mfg. Co.
Labline, Inc.
Leeds & Northrup
Magnetic Amplifiers
Modern Lab. Equip.
Nurnberg Thermometer
Phipps & Bird
Precision Scientific
Premier Research Labs
Quaid Fabrications
Reeves-Hoffman Div.
Stromes Systems
Temp. Engrg. Corp.
Tenney Engrg., Inc.
Testing Machines
Valpey Crystal
Will Corp.
Young Brothers

OVENS, Testing and Aging

Amer. Gas Furnace
Amer. Instr. Co.
Associated Testing Labs
Auto Control Labs.
Blue M Electric
Bristol Engrg. Labs
Bush Assoc., G. F.
Cook Eelectric
Electric Hotpack Co.
Emerson App. Co.
Fisher Scientific
Food Technology, Inc.
Gordon Co., Claud S.
Greiner, Emil
Grieve-Hendry
Harshaw Scientific Div.
Hevi-Duty Electric
Hieatt Engrg. Co.
Huppert Co., K. H.
Kinney Mfg. Div.
Kirk & Blum
L & L Mfg. Co.
Labline, Inc.
Leeds & Northrup
Mast Devel.
Mid-Century Instrumatic
Modern Lab. Equipt. Co.
Natl. Appliance Co.
New Bunswick Scientific
Norberg Thermometer
Precision Scientific
Quaid Fabrications
Res. Appliance Co.
Research Speciaties
Rockwell Co., W. S.
Schaar & Co.
Scott Tester, Inc.
Stromes Systems
Surface Combustion Corp.
Temp. Engrg. Corp.
Tenney Engrg., Inc.
U. S. Testing Co.
Warren Bros. Mfg. C.
Will Corp.

OVER and UNDER-WEIGHT INDICATORS FOR BEAM SCALES, see Weighing Scales

OXIDATION-REDUCTION POTENTIAL INSTRUMENTS, including Detectors

Analytical Measur., Inc.
Beckman Insts.
Bristol Co.
Coleman Instr.
Fischer & Porter
Fisher Scientific
Foxboro Co.
Mine Safety Appliances
Scientific Instr. Co.
Wallace & Tiernan

OXYGEN ANALYZERS, see Gas Analyzers

OXYGEN REGULATORS, Aircraft, including Demand Valves

AiResearch Mfg. Co.
Bastion Blessing

Bendix, Eclipse-Pioneer
Bendix, Pioneer-Central
Black Mfg.
Gadgets, Inc.
Gaertner Scientific
Grove Valve & Reg
Keller & Co., L. H.
Linde Co
Mine Safety Appliances
Mira Scient. Insts.
Robertshaw-Fulton

PAINT

Bakelite Corp.
Crown Indust. Prods.
Du Pont
Emerson & Cuming, Inc
Metal & Thermit Corp
Micro-Circuits Co.
Photo Chemical Prods.
Sherwin-Williams Co
Stanley Works
Switzer Bros
Tempil Corp
Wardem Electronics

PAINT, Conductive

Acheson Colloids
Centralab Div.
DuPont
Emerson & Cuming
Fineisen, A. R.
General Cement Mfg
Handy & Harman
Micro-Circuits Co.
Photo Chemical Prods.
Radio Corp. of Amer
Sauereisen Cement Co.
Torrance Glass & Color

PAINT, Changing Color with Temperature, see Temperature-Sensitive Paint

PAINT TEST INSTRUMENTS, including Hiding Power, Film Thickness, etc.

Amer. Instr. Co.
Applied Research Labs
Atlas Elect. Devices Co
Boonton Radio
Brabender Instr.
Cambridge Instr. Co
Central Scientific
Custom Scient. Insts.
Dice Co., J. W.
Dillon & Co.
Fish-Schurman
Fisher Scientific
Gardner Laboratory
GE Apparatus Sales
Greiner Glassblowing Lab
Hellige, Inc.
Instron Engrg. Corp
Koehler Instr. Co.
Moore Co., H. R.
Moore Corp., John B
Munsell Color Co.
Palos Optical Co
Photovolt Corp.
Precision Scientific
Reiner Electronics
Scientific Instr. Co
Scott Testers
Spellman Television
Taber Instr. Co.
Temperature Engrg
Tenney Engrg. Co.
Thermo-Electric Co.
U. S. Testing Co., Inc.
Universal Aviation
Van Keuren Co.
Zuhr, Inc., Henry

PANELBOARDS, see Panels, also Cabinets, also Cases

PANEL LIGHTS, see Pilot Lights

PANELS, Edge Lighted

Ackerman Engravers
Acromark Co.
Allied Engraving
Bailey Meter Co.
Bodnar Industries
Can. Radium & Uranium
Carroll Co.
Conn-Craft Co.
Croname, Inc
Dialight Corp.
Eldema Corp
Falstrom Co.
Gustaveson, Inc.
Hays Corp.
Lancaster Glass
Maryland Etching Co.
Miller Dial & Name Pl.
Mutual Elect. Indus.
Sampson Chem. & Pigm
Scheidl Mfg. Co
Scientific Instr. Co
Spartan Coach & Mfg. Co
Spivey, Inc., James S.
Sun Dial Corp
Swanson Engrg. Co.
Texas Apparatus Co
U. S. Radium Corp.

PANELS, Graphic

Ackerman Engravers
Acromark Co.
Allied Engraving
Askania Reg. Co.
Askania-Werke, A. G.
Autom. Timing & Controls
B-I-F Industries
Bailey Meter Co
Bogue Elect. Mfg. Co.
Bristol Co.
Can. Rad. & Uran.
Cleveland Metal Specs.
Control Panel Corp.
Control Specialty Corp.
Croname, Inc.
Custom Line Panel
Devco Engrg
Dietz Co.
DuBois Engrg. & Mfg.
Falstrom Co.
Fischer & Porter Co.
Foxboro Co.
Gustaveson, Inc.
Hopp Press, Inc.
Indust. Contr. Panel Co.
Indust. Engrg. Corp.
Instrument Lab., Inc.
Johnson Service Co.
Joy Co., Clark H
Lake Erie Electric
Machinery Electrification
Magnetic Industries
Maryland Etching Co.
Maymer Corp.
Miller Dial & Name Pl
Minneapolis-Honeywell Indust. Div.
Nelson Electric Mfg.
Panellit, Inc.
Penn Panel & Box Co
Photo Chemical Prods
Renick Co., L. C.
Scientific Instr. Co.
Seton Name Plate
Suffolk Prods. Corp
Sun Dial Corp.
Swanson Engrg. Co
Taller & Cooper
Techiques Inc.
Texas Apparatus Co
U. S. Radium Corp
Wolfe & Mann

PANELS, Instrument, Metal, Including Cubicles, Housings

ARF Products
Abalin Pres. Mfg
Acromark Co.
Aerolite Electronics
Alden Products
Allied Engraving
Amer. Emblem Co.
Amer. Kloeckner-Moeller
Amer. Mach. & Foundry
Anderson & Sons
Artisan Metal Works
Askania Reg. Co.
Askania Werke, A. G
Autom. Timing & Controls
Avion Div.
B-I-F Industries
B. W. Controller
Bailey Meter Co
Baltic Metal Prods.
Barber-Colman
Barnes Co., W. F. & J.
Berkshire Labs
Bristol Co
Brooks & Perkins
Bud Radio, Inc.
Builders-Providence
Cal-Ohm Labs.
Cal-Tronics Corp.
Can. Rad & Uran
Chicago Thrift Etching
Churchill Lighting
Cleveland Controls
Columbia Metal Co
Continental Elect-Equipt
Control Engrg. Co.
Control Panel Corp.
Control Specialty Corp
Cooper Co., Clark
Craig Systems, Inc.
Croname, Inc.
Custom Line Panel
Daven Co.
Devtronics, Inc
Dittmore & Freimuth
Dietz Co., Henry G
Dietz Design & Mfg
DuBois Engrg. & Mfg
Eastern Specialty Co
Edlin Co.
Electro-Chemical Engrg.
Electro Devices (St. Louis)
Engrg. & Research Corp.
Etched Prods. Corp
Falstrom Co.
Fischer & Porter Co
Foxboro Co.
Gates Radio Co
Gaydon Co.
General Control
GE Apparatus Sales
General Etching & Mfg.
General Regulator Corp.
Globe Industries, Inc.
Gold Seal Mfg. Co.
Grammes & Sons, Inc.
Guardite Co
Gustaveson, Inc.
Hagan Chem. & Controls
Hammer Electronics
Hays Corp
Henschel Corp.
Indust. Contr. Panel Co
Indust. Engrg. Corp.
Instrument Lab., Inc.
Instrument Tool & Eng.
Insuline Corp. of Amer.
Johnson Co., E. F.
Joy Co., Clark H.
Kahn & Co
Karp Metal Prods. Co.
Kato Engrg
King Engrg. Corp
Kirk & Blum
Lake Erie Electric
Lewyt Corp.
Littleford Bros.
Magnetic Industries
Maryland Etching Co.
Mason-Neilan Div.
Maymer Corp.
Mid-Century Instrumatic
Miller Dial & Name Pl.
Minneapolis-Honeywell Indust. Div.
Moore Products
Moss & Co., Henry
Mullenbach Div.
Natural Gas Equipt.
Nelson Electric Mfg.
Nelson Instr. Co.
Nems-Clarke, Inc.
Newark Electric Co
NYT Electronics
Olympic Metal Prods.
Palos Optical Co.
Panellit, Inc.
Park Nameplate Co.
Par-Metal Prods. Corp
Patterson Co., Wayne D
Penn Insts. Div.
Penn Panel & Box Co.
Photo Chemical Prods.
Pneumafil Corp.
Premier Metal Prods. Co
Proportioneers, Inc.
Rapidan Mfg. Co.
Regal Plastic Co.
Regent Controls
Reiner Electronics Co.
Reliance Instr. Mfg. Corp
Renick Co., L. C.
Riester & Thesmacher
Roller-Smith
Sampson Chem. & Pigm.
Seam Instr. Corp.
Scientific Instr. Co.
Scovill Mfg. Co.
Seton Name Plate
Simplex Valve & Meter
Simpson Electric
Spaulding Fibre Co
Spivey, Inc., James S.
Std. Elect. Time Co
Suffolk Products
Sun Dial Corp
Swain Electric Co
Swanson Engrg. Co
Taller & Cooper
Technical Soldering Co.
Teletronics Labs., Inc
Texas Apparatus Co.
Texas Instrs., Inc
Trerice Co.
U. S. Radium Corp.
Universal Aviation Equipt
Virginia Electronics
Walker Div
Warren Bros. Mfg. Co
Western Devices
Western Lithograph Co
Wheelco Instr. Div.
Wolfe & Mann
Zero Mfg. Co.

PANELS, Instrument, Plastic, Including Housings

Acromark Co
Aerolite Electronics
Allegheny Plastics
Allied Engraving
Amer. Kloeckner-Moeller
Amer. Name Plate
Amer. Phenolic Corp.
Auburn Button Wks.
Bodnar Industries
Bristol Co.
Brooks Rotameter
Cal-Ohm Labs.
Can. Radium & Uranium
Carroll Co.
Cast Optics
Chicago Thrift Co.
Conn-Craft Co.
Continental-Diam. Fibre
Craig Systems, Inc.
DuBois Engrg. & Mfg.
Dura Plastic Co.
Eastern Specialty Co.
Electro-Chemicals Engrg.
Engrg. & Research Corp.
Etched Prods. Corp
Fischer & Porter Co
Formica Co.
GE Apparatus Sales
Globe Industries, Inc.
Grammes & Sons, Inc
Gustaveson, Inc.
Hopp Press, Inc.
Instrument Tool & Engrg.
Insuline Corp. of Amer.
Joy Co. Clark H.
Lewyt Corp.
Maryland Etching Co.
Maymer Corp.
Mica Insulator
Miller Dial & Name Pl.
Molded Insulation Co.
Moss & Co., Henry
Mutual Elect. Indus.
National Controls
Nelson Electric Mfg.
Nelson Instr. Co
Palos Optical Co
Panellit, Inc.
Parisian Novelty Co.
Patterson Co., Wayne D.
Penn Panel & Box Co.
Photo Chemical Prods
Premier Metal Prods.
Printloid, Inc.
Regal Plastic Co
Renick Co., L. C
Richardson Co.
Rogan Bros.
Roller-Smith
Sampson Chem. & Pigm.
Santay Corp.
Scheidl Mfg. Co.
Scientific Instr. Co
Seton Name Plate
Shallcross Controls
Sierracin, Inc.
Sillcocks-Miller Co.
Simpson Electric
Spaulding Fibre Co.
Spivey, Inc., James S
Stricker-Brunhuber
Sun Dial Corp.
Swanson Engrg. Co.
Taller & Cooper
Texas Apparatus Co
Texas Insts., Inc.
Universal Aviation Equipt
U. S. Gasket Co.
U. S. Radium
Valley-National
Waldom Electronics
Walker Div
Warrick Products
Waterbury Companies
Watertown Mfg. Co

PANELS, Radio Test

Adler Electronics
Allied Engraving
American Electroneering
Amer. Mach. & Foundry
Anderson & Sons
Authorized Mfrs. Service
Baer Co., S. C.
Bruno-N. Y. Indus.
Bud Radio
Bunnell Co
Cal-Tronics Corp.
Computer Co. of Amer.
Dietz Co., Henry G.
Engrg. & Research Corp.
Faltsrom Co.
Gates Radio Co.
General Electronic
Inst. Corp. of Fla
Instr. Devel. & Mfg. Corp.
Kahn & Co.
Karp Metal Products
Lear, Inc.
Miller Dial & Name Pl.
Muniston Mfg. & Service
Nems-Clarke, Inc.
Par-Metal Products
Phaostron Co.
Premier Metal Prods.
Radiaphone Co.
Reiner Electronics
Scientific Instr. Co.
Simpson Electric
Spivey, Inc., James S
Suffolk Products
Sun Dial Corp.
Swanson Engrg. Co.
Universal Aviation
Virginia Electronics

PANELS, Weatherproof Housing

Allied Engraving
Amer. Kloeckner-Moeller
Amer. Machine & Foundry
B-I-F Industries
B. W. Controller
Bailey Meter Co.
Bristol Co.
Control Panel Corp.
Control Specialty Corp.
Cooper Dev. Corp
Craig Systems, Inc.
Dittmore & Freimuth
~~Du Bois Engrg~~ & Mfg.
Engrg. & Research Corp.
Falstrom Co.
Fischer & Porter Co.
Gates Radio Co.
Gustaveson, Inc.
Indust. Engrg. Corp
Joy Co., Clark H.
Kin-Tel
Keller Products

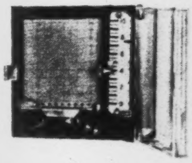
When Using This Guide look under the variable, e.g., Pressure Gages (not Gages, Pressure); or look under the noun—Magnets, Permanent (not Permanent Magnets).

Miniature Graphic Panel instruments for pneumatic transmission

This new system measures, indicates, records and controls pressure (5 in. water to 10,000 psi), absolute pressure (5mm mercury absolute and up), temperature, vacuum, flow, differential pressure, liquid level, and mechanical motion.

The only instrument that fully carries out the basic graphic-panel idea. Includes full plug-in-service and continuous valve position indication. There are 38 receivers and 36 controller models and the widest variety of transmitters on the market. A model is available that will exactly meet every requirement.

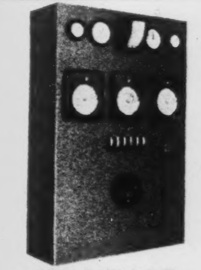
Write for bulletin A128 today.



Bristol Metagraphic Recorder

BRISTOL COMPANY
112 Bristol Rd., Waterbury 20, Conn.

For more information circle **200** on inquiry card.



STANDARD
BAILEY
CONTROL PANELS

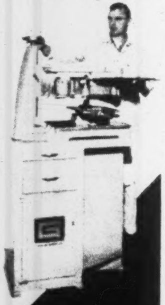
With Bailey Panels you get:

Standard Designs You save appreciable initial costs by selecting your panel from the many standard dimensional combinations.
Complete Panel Engineering Service—Experienced engineers recommend the right equipment for your needs.
Fast Installation—Equipment is mounted and ready for use.
Greater Economy—You eliminate the costly details of purchasing, receiving, and installing hundreds of pieces of equipment.
Undivided Responsibility—Only Bailey Meter Company is responsible for the workability of your panel.
Attractive Appearance—Panel is designed to look right as well as work right.
More Efficient Design—Standard contours were developed as a result of research in the field of functional design, glare elimination, and accessibility of controls.

Request Product Specification G71-7.

BAILEY METER COMPANY
1041 IVANHOE ROAD CLEVELAND, O.
Bailey Meter Company Ltd. Montreal, Canada

For more information circle **201** on inquiry card.


GREEN ***Pantograph Engravers***

ELIMINATE DELAYS!

Keep the work in your own plant.

PORTABLE 40-POUND BENCH-MODEL 106

Famous 2 or 3-dimensional engraver, successfully used by thousands, features 5 positive, accurate pantograph ratios. Versatile ball bearing spindle has three speeds up to 14,000 rpm; height of pantograph and position of cutter are continuously adjustable; one copy carrier (supplied) accepts all standard master type sizes.

The Model 106 has proven incomparable for speed and accuracy . . . yet reasonably priced.

Cutter grinders, rotary tables, master letters, compound slides, name plates and all required accessories. For complete information, write to

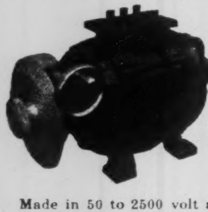
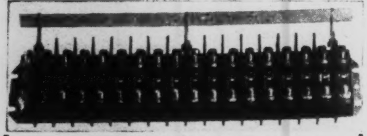
MODEL D2 HEAVY-DUTY 2-DIMENSIONAL

- 575 pounds — rigid, sturdy, precise
- Vertical adjustment of copy table automatic with Pantograph
- Unobstructed on three sides to take large work
- Micrometer adjustment for depth of cut
- Ball-bearing construction throughout — super-precision ball bearing spindle
- Spindle speeds up to 26,000 rpm for engraving or machining modern materials
- Ratios 2 to 1 to infinity — master copy area 26" x 10"
- Vertical range over 10"

GREEN INSTRUMENT COMPANY, INC.

383a PUTNAM AVENUE, CAMBRIDGE 39, MASS.

For more information circle **202** on inquiry card.



STATES TESTING EQUIPMENT

Quick Safe Economical

Phase Shifter Type R

Made in 50 to 2500 volt ampere capacities. Provides means for shifting phase continuously for every possible angular displacement. May be obtained as combination of phase shifter and induction regulator.

TYPE "NT" TERMINAL BLOCK

Sliding link feature. Any number poles desired. Test any circuit without removing permanent wiring.

THE STATES COMPANY

19A New Park Ave. Hartford, Conn.

Please send me information on

☐ Phase Shifters

☐ Type NT Terminal Block

Name .... Title ....

Firm ....

City .... Zone .... State ....

For more information circle **203** on inquiry card.

Lake Erie Electric
Mercoid Corp.
Nelson Electric Co.
Rapidan Mfg. Co
Regal Plastic Co.
Reiner Electronics
Scientific Instr. Co.
Suffolk Products
Swanson Engrg. Co.
Texas Apparatus Co.
Warren Bros. Mfg. Co
Wolfe & Mann

PANORAMIC ADAPTERS, see Spectrum Analyzers

PANTOGRAPHS

Allied Engraving
Dietzgen Co
Dittmore & Freimuth
Gaertner Scientific
Gordon Enterprises
Gorton Mach. Co., George
Green Instr. Co.
Instruments Corp.
Jerpbak-Bayless
Keuffel & Esser
Los Angeles Scient. Instr.
Mico Instr. Co
New Hermes, Inc.
Newmatic Corp.
Physics Research
Preis Engraving Mach.
Speidel & Co.
Warren-Knight
Weber Co.

PAPER, Graphic Recording, see Charts

PAPER and PULP TESTING MACHINES and INSTRUMENTS, including Folding Endurance, Stiffness, Tearing, also Gummed Tape

Allegany Instr. Co
Amer. Instr. Co
Amthor Testing
Atlas Elect. Devices
Atmosphere Control
Baldwin-Lima-Hamilton
Bausch & Lomb
Brown & Sharpe Mfg.
Bush Assoc. G. F.
Cary & Co.
Central Scientific
Custom Scient. Insts
Devtronics, Inc.
Dietert Co.
Dillon & Co.
Emerson Apparatus Co
Federal Prods. Corp.
Ferner Co.
Fielden Instr. Div.
GE
Gardner Laboratory
Greiner, Emil
Gurley, W. & L. E.
Hacker & Co., W. J.
Hart Moisture Gage
Hygrotester, Inc.
Instron Engrg. Corp
Labline, Inc.
Laboratory Equipt.
Meyer Opticraft
Olsen Testing Machine
Palo Lab Supplies
Perkins & Son
Photovolt Corp.
Precision Scientific
QOS Corp.
Rienle Div.
Scott Co., Henry L.
Scott Testers, Inc.
Sheffield Corp.
Speidel & Co.
Steel City Testing
Suter, Alfred
Sweets Co., Martin
Taber Instr. Co.
Testing Machines, Inc.
Thwing-Albert
Toledo Scale Co
U. S. Testing Co.
Van Keuren Co.
Williams Apparatus Co.

PARAFFIN and/or PITCH TESTERS

Amer. Instr. Co.
Apex Scientific
Chatillon & Sons
Chicago Surgical & Elect.
Humboldt Mfg. Co.
Jerpbak-Bayless
Koehler Instr. Co
Labline, Inc.
Olsen Testing Mach
Perkins & Son
Precision Scientific
Temperature Engrg.
Thwing-Albert
Weston Electcl. Instr.

PARTICLE INSTRUMENTS, including Particle Size (see also Air Particle)

Amer. Instr. Co.
Amer. Mach. & Foundry
Bausch & Lomb
Bush Assoc. G. F.
Central Scientific Co.
DuMont Labs., Allen B.
Fed. Pneumatic Systems
Ferner Co., R. Y.
Fisher Scientific
Franklin Electronics
GE, Apparatus Sales
LaPine & Co
Meyer & Co., Hugo
Mine Safety Appliances
Northam Electronics
Opplem Co., Inc.
Palo Lab. Supplies
Phoenix Prec. Instr.
Precision Scientific
Weber Gage Co.

PASSOMETERS

Ercona Corp.
Keuffel & Esser
Weber Co.
Zeiss, Inc., Carl

PEDOMETERS

Dietzgen Co.
Keuffel & Esser
Warren-Knight
Weber Co.
White Co., David

PELLET PRESSES, see Machines, Presses, Pellet

PELORUSES

Arma Corp.
Bliss & Co.
Hand & Sons
Keuffel & Esser
Laboratory Specialties
Leupold & Stevens
Marine Compass Co.
Meyer-Opticraft
Negus T. S. & J. D
Pioneer Instr. Co.
Prec. Thermom. & Insts.
SperryGyroscope
Stafford Co
Thwing-Albert
Warren-Knight

PENDULUM MACHINES, see Impact Test

PENETROMETER NEEDLES, see Asphalt Testing Apparatus

PENS, Recorder, see Recorder Pens

PERISCOPES, Industrial and Smoke

Align-A-Scope Inc.
Amer. Optical Co.
Bronoptics Co.
Buhl Optical
Davidson Mfg.
Ess Instr. Co.
Fecker, Inc.
Gaertner Scient. Corp.
Helio Instr. Co.
Kollmorgen Optical
Lab. Optical Co.
Lenox Instr. Co.
McNeill Engrg. Co
National Elect. Instr.
Palos Optical Co.
Penberthy Instr. Co.
Perkin-Elmer
Schneider-Cogswell, Inc.
Testa Mfg. Co
Tinsley Labs.
Unertl Optical
Zenith Optical

PERISCOPES, Military and Naval

Align-A-Scope Inc.
Amer. Optical Co.
Bausch & Lomb
Belock Instr.
Bray Optical
Bronoptics Co.
Buchele, W.
Buhl Optical
Burton Mfg. Co.
Curtis Labs. Inc.
Davidson Mfg. Co.
Edmund Scientific
Farrand Optical
Fecker, Inc.
Gaertner Scientific
Gordon Enterprises
Helio Instr. Co.
Keuffel & Esser
Kollmorgen Optical
Kollsman Instr. Corp.
Lenox Instr. Co.
Librascope, Inc.
Mast Devel.
Norden-Ketay
Northrop Anaheim
Opplem Co.
Owens-Illinois
Palos Optical Co.
Penn Optical & Instr.
Perkin-Elmer
Schneider-Cogswell, Inc.
Topp Industries
Unertl Optical
Wild Heerbrugg
Zenith Optical

PERMANENT MAGNETS, see Magnets

PERMANENT-MAGNET MOVING-COIL MOVEMENTS, see D'Arsonval Movements

PERMEAMETERS, Magnetic

Aero Electronics
Annis Co.
Brownell, H. Russell
Cambridge Instr. Co.
Fisher Scientific
GE
Hathaway Instr. Co
Leeds & Northrup
Minneapolis-Honeywell
  Rubicon Instrs
Rawson Electcl. Instr.
Rese Engrg. Co.
Sensitive Res. Instr.
Sunshine Scientific
Welch Scientific

PERMEAMETERS, Porosity

B-I-F Industries
Cambridge Instr.
Fisher Scientific
Gurley, W. & L. E.
Humboldt Mfg. Co.
Precision Scientific
Ruska Instr. Corp.
Sheffield Corp.
Soiltest, Inc.
Teiex, Inc
Testing Machines, Inc
Thwing-Albert

PETROLEUM TESTING INSTRUMENTS

Alpha Corp.
Amer. Instr. Co.
Amer. Research Corp.
Apex Scientific
Applied Research Labs.
Associated Research, Inc
Automation Prods., Inc.
Baird-Atomic
Bausch & Lomb
Blue M Electric
Boekel & Co.
Brabender Instrs
Brooks Rotameter
Brush Instrs
Central Scientific
Consol. Electrodynamics
Cook Research Labs.
Dietert Co., Harry W.
Eitzen Co., Louis C.
Ercona Corp.
Fish-Schurman
Fisher Scientific
G. M. Mfg. Co.
Gardner Laboratory
GE, Apparatus Sales
Gerin Corp.
Greiner Co., Emil
Greiner Glassblowing Lab.
Griebel Co.
H-B Instr. Co
Hallikainen Insts.
Hellige, Inc.
Humboldt Mfg. Co.
Industrial Instr. Inc
Jarrell-Ash
Kimble Glass
Klett Mfg. Co
Koehler Instr. Co
Kontes Glass
Labline, Inc.
Laboratory Equipment
Mico Instr. Co.
Moeller Instr. Co.
Moisture Register Co.
Murphy & Miller
Nuclear Research
Oil Well Water Loc. Co
Oil Metering & Processing
Parr Instr. Co.
Peschel Electronics
Photovolt Corp.
Precision Scientific
Refinery Supply
Refrigeration Syst.
Research Appliance Co.
Ruska Instr. Corp.
Ruttco Mfg. Co.
Sargent & Co.
Scientific Glass App.
Scientific Instr. Co.
Seedburo Equipt. Co.
Technical Equipt. Co.
Tenney Engrg. Co
Testing Machines, Inc.
Trimount Instr. Co.
Ultra-Violet Products
U. S. Gauge Div.
Visco-Meter Corp.
Weksler Instrs.
Wilkens-Anderson

pH CONTROLLERS

Advanced Insts.
Askania Reg. Co.
Askania-Werke, A. G
Assembly Products
B-I-F Industries
Bailey Meter Co
Barber-Colman
Beckman Div., Beckman
  Inst.
Bristol Co.
Cambridge Instr. Co.
Cybertronic Corp.
Fielden Instr. Div.
Fisher Governor
Foxboro Co.
General Controls
Hagan Chem. & Controls
Internat. Instr. Co
LaMotte Chem. Prods.
Lapp Insulator
Leeds & Northrup
Macbeth Corp.
Manning, Maxwell & Moore
Milton Roy Co
Minneapolis-Honeywell,
  Indust. Div.
Phila. Pump & Machinery
Process & Instruments
R. K. L. Valve & Mfg.
Research Controls
Servomechanisms, Inc.
Thwing-Albert
Tipp-Tronic, Inc.

pH INDICATORS and/or RECORDERS

Ace Glass Inc.
Advanced Insts.
Aloe Co., A. S.
Analyt. Measmts., Inc.
Askania-Werke, A. G
Assembly Products
Bailey Meter Co
Barber-Colman
Beckman Insts.
Bellco Glass
Bristol Co.
Cambridge Instr. Co
Central Scientific
Coleman Instruments
Connelly, Inc.
Curtiss-Wright
Daigger & Co.
Epic Inc.
Fielden Instr. Div.
Fisher Scientific
Foxboro Co
Gamma Instr. Co
GE
General Laboratory
Gray Instrument Co.
Greiner, Emil
Hagan Chem. & Controls
Hallikainen Insts.
Hastings Raydist
Hellige, Inc.
Hickok Electcl. Instr.
Industrial Insts., Inc.
Internat. Instr. Co.
Kimble Glass
Kontes Glass
La Motte Chem. Prods.
Leeds & Northrup
Leitz, Inc.
Macbeth Corp.
Machlett & Son
Marconi Instruments
Martin & Co.
Minneapolis-Honeywell
  Indust. Div.
Pfaltz & Bauer
Photovolt Corp.
Precision Scientific
Rascher & Betzold
Rawson Electcl. Instr.
Rowe Radio Research
Rubicon Co.
Sargent & Co.
Scientific Glass
Specialty Glass Co.
Taylor & Co., W. A.
Technical Products
Testing Machines, Inc.
Thwing-Albert
Wallace & Tiernan
Welch Mfg. Co., W. M.
Weston Instrs.
Wilkens-Anderson
Will Corp.
Wilson Co.

PHASE ANGLE INDICATORS

Acton Labs.
Ad-Yu Electronics Labs.
Amplifier Co.
Avion Div.
Berkeley Div.
Clarke Instr. Corp.
Computer Co. of Amer.
Computer Measmts. Corp.
Cubic Corp.
Daystrom-Pacific
Deltron, Inc.
Eastern Specialty Co
Farnsworth Electronics
Feiler Engrg. Co.
Flight Research Inc.
Hastings-Raydist
GE Apparatus Sales
Hycon Electronics

Indust. Test Equipt. Co
Link Aviation
Magnetic Amplifiers
Maxson Corp., W. L.
Metrolog Corp
Muirhead Instrument
North Atlantic Industs
Nosker Engrg. Prods.
Olsen Testing Machines
Probescope Co
RCA Div.
Rockwell Engrg. Co
Seismograph Service Corp
Sensitive Research Instr.
Servo Corp. of Amer.
Square D Co.
Statham Devel. Corp
Systron Corp
Technology Instruments
Telechrome, Inc.
Trio Labs., Inc.
Triplett Electcl. Instr
Weston Hydraulics

PHASE CONTROLLERS

Allen-Bradley
Allis-Chalmers
Cal-Tronics Corp
Clarke Instr. Corp.
Cutler-Hammer
General Controls
Industrial Test Equipt
GE. Apparatus Sales
Magnetic Instr. Co.
Raytheon Mfg. Co.
Tipp-Tronic, Inc
Westinghouse Electric

PHASE SEQUENCE INDICATORS

Associated Research
Brunswick Instruments
Burroughs Corp.
Computer Co. of Amer.
Davenport Mfg. Co
Eastern Specialty Co.
Electro-Tech Equip.
Ferranti Electric
Fox Valley Instr. Co.
GE. Apparatus Sales
Industrial Test Equipt
Knopp, Inc.
Measurement Corp.
Meter Devices Co.
Sell Electric
Sticht Co., Herman H
Telechrome, Inc.
United Mfg. Co. Div.
United Optical

PHASE SHIFTERS

Acton Labs.
Adler Electronics
Amer. Measurement & Control, Inc
Associated Research
Bogart Mfg. Co
Boonton Radio
Brunswick Instruments
Centralab Div
Clifton Prec. Prods.
Cubic Corp
Daystrom Instrument
DeMornay-Bonardi
Diamond Antenna & Microwave
Diehl Mfg
Dynamics Research
F. R. Machine Works
GE. Apparatus Sales
Helipot Div.
Hewlett-Packard
Hycon Electronics
Indust. Test Equipt. Co.
Inst. Corp. of Fla.
Jones Optical Works
Kearfott Co.
Keystone Products
Knopp, Inc.
Kollsman Instr. Corp.
Lectronic Research Labs
Maxson Instruments
Nilsen Mfg. Co
North Atlantic Industs
Radiaphone Co.
Reeves Instr. Corp.
Seismograph Service Corp
Sierra Elec. Corp.
Sperry Gyroscope Co.
States Co.
Technology Instruments
Telechrome, Inc.
Trio Labs., Inc.
United Transformer Corp.
Vectrol Engrg., Inc.
Westinghouse Electric

PHOSPHATE TESTING EQUIPMENT

Hagan Chem. & Controls
Hellige, Inc.
La Motte Chem. Prods.
Permutit Co.
Taylor & Co., W. A.

PHOSPHORESCENT MATERIALS, see Luminescent Materials

PHOTOCOPY EQUIPMENT (see also Xerography Equipment)

Amer. Photocopy Equipt.
Aristo Grid Lamp Prods.
Bruning Co., Charles
Copease Corp.
Dick, A. B.
Eastman Kodak Co.
Fisher Co., Oscar
Genl. Photo Prods.
Gordon Enterprises
Haloid Co.
Ludwig, Inc., F. G.
Maurer, J. A., Inc.
P & H Sales Corp.
Remington-Rand
Vectron, Inc.
Williamson Development

PHOTOELASTICITY POLARISCOPES, see Polariscopes

PHOTOELECTRIC CELLS

Alfa Amer. Corp.
Arnhold Ceramics, Inc
Autron Engrg., Inc
Basic Controls, Inc
Bradley Labs.
Bristol Co.
Clairex Corp.
Continental Elect. Co.
Dearborn Scientific
De Jur-Amsco
DuMont Labs., Inc
Eby, Inc.
Electronic Prods. Co.
Electron-Radar Prods
Energy Kontrols
Engelhard, Inc., Charles
Epic, Inc
Federal Telephone & Radio
Fredericks, George
GE. Apparatus Sales
General Scientific Corp
Gordos Corp.
Haledy Electronic Co
Hickok Electcl. Instr
Hughes Aircraft
Hupp Electronics
Infrared Industries
Instruments Devel. Labs
Kemlite Labs
International Rectifier
Leitz, Inc.
Lumenite Electronic Co
Newark Electric Co.
Photo-Crystals, Inc.
Photovolt Corp.
Phoenix Prec. Instr.
Photo Res. Corp.
Porter, George K.
Potter Instr. Co.
Precise Measmts. Co
RCA Div.
Scientific Specialties
Vacutron, Inc.
Vickers Electric Div.
Waldorf Inst. Co
Western Radiation Lab
Westinghouse Electric
Weston Instrs
Worner Electronics

PHOTOELECTRIC COLOR ANALYZERS and COMPARATORS, see Color Analyzers, Photoelectric

PHOTOELECTRIC CONTROLS, including Counters, Door Openers, etc. (see also Counters, Photoelectric

ACF Electronics
ALWAC Corp.
Amer. Electronic Labs.
Amer. Hydromath
Assembly Products
Automation, Inc
Automation Management
Automatic Elect. Chicago
Autotron Co.
Autron Engrg., Inc.
Avion Div.
Baird-Atomic
Barber-Colman
Basic Controls, Inc
Berkeley Div.
Berkshire Labs
Bristol Co.
Brit. Electronic Sales Co
Clark Controller
Cutler-Hammer
Datascan, Inc
Davenport Mfg. Co.
Dearborn Scientific
Detect-O-Ray
De-Tec-Tronic Corp.
Eby, Inc
Electric Sorting Mach. Co.
Electro Physics Co.
Electron-Radar Products
Electro-Tec Equipt
Electronic Control Corp.
Electronic Prods. Co
Electronics Corp. of Amer.
Energy Kontrols
Engineering Res. & Devel.
Erdco Engrg. Co.
Ess Instr. Co.
Farmer Elect. Prods. Co.
Fisher-Pierce
Flight Research
Furst Electronics
GE. Apparatus Sales
General Instr. Co.
Gorrell & Gorrell
Guardian Electric
Haledy Electronic Co.
Hansen Co., Wm.
Hathaway Instr. Co.
Heat Timer Corp.
Hillyer Instr. Co.
Huggins Lab.
Hunter Mfg. Co.
Hupp Electronics
Indust. Electronic Conts.
Industrial Electronics
Instrument Devel. Labs
Intercontinental Dynamics
Jordan Co.
Kaye Devel. Co.
Lab. Optical Co.
Larson Instr. Co.
Lumenite Electronic Co
Machinery Electrification
Magnetic Amplifiers
Marion Electcl. Instr.
Martin-Hubbard
McNeill Engrg. Co.
Micro Balancing Inc.
Minneapolis-Honeywell
Newark Electric Co.
Phoenix Prec. Inst.
Photobell Co.
Photo-Crystals, Inc.
Post Machinery Co.
Potter Instr. Co.

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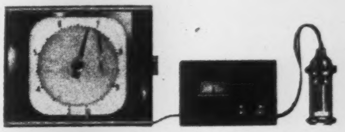

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Reliance Instr. Mfg. Corp
Research Appliance Co.
Rockwell Engrg. Co
Rubicon Co
Shepard Labs.
Sigma Instruments
Spellman Television
Sticht Co., Herman H
Sweets Co., Martin
Systron Corp
Temperature Engrg
Toledo Scale Co.
Tri-Dex Electronics
Tri-Tronics
Trott Electronics
Unitronics, Inc.
Virginia Electronics
Wabash Instr. & Specs. Co
Waldorf Inst. Co
Westinghouse Electric
Wilson & Co.
Worner Electronic Devices

PHOTOGRAMMETRIC INSTRUMENTS

Abrams Instr. Corp
Aero Electronics
Allied Prods. Div.
Amer. Instr. Co.
Amer. Paulin Sys.
Askania-Werke A. G.
Bausch & Lomb
Bronoptics Co.
Chicago Aerial Industs
Ercona Corp.
Fairchild Camera & Instr.
Fairchild Reconnaissance
Fecker, Inc.
Fisher Co., Oscar
Fish-Schurman
Gaertner Scientific
Gordon Enterprises
Henson Co., Fred C.
Hillyer Instr. Co.
Instruments Corp.
Leupold & Stevens
Mast Devel
Meyer Opticraft
Opplem Co., Inc.
Parabam, Inc
Photogrametry Inc.
Photoplating Co.
QOS Corp.
Reed Research, Inc.
Vanguard Instr. Co
Vectron, Inc.
Wild Heerbrugg
Zeiss, Inc., Carl
Zoomar Corp.

PHOTOGRAPHIC COPIES ON METALS and PLASTICS

Aerolite Electronics
Can. Rad. & Uran.
Eastman Kodak Co.
Edroy Products
Glass Products Co.
Grammes & Sons
Maryland Etching Co.
Maymer Corp.
Miller Dial & Name Plate
Park Nameplate Co.
Photo Chemical Prods.
Photoplating Co.
Sibley Co.
Sillcocks-Miller
Truline Process Co.
Wadsworth Watch Case

PHOTOGRAPHIC EXPOSURE METERS, see Photographic Supplies, also Illumination Instruments

PHOTOGRAPHIC SUPPLIES (see also Cameras)

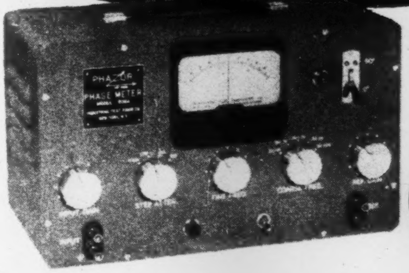
Amglo Corp.
Aristo Grid Lamp Prods.
Bar-Ray Products
Bel-Art Products
Chapman Labs.
Dearborn Scientific
DeJur-Amsco
Eastman Kodak Co.
Electro-Physics Co.
Fisher Co., Oscar
G-M Labs.
GE. Apparatus Sales
Genl. Photo Prods. Co.
Gordon Enterprises
Haloid Co.
Helland Div.
Hickok Electcl. Instr.
Houston-Fearless
Jordon Corp. Div.
Lynn, Robert M.
Marion Electcl. Instr.
Miller Dial & Name Plate
Pancro Mirrors, Inc.
Photovolt Corp.
Rockwell Engrg. Co
Roller-Smith
Shepard Labs.
Starr Corp.
Traid Corp.
Triplett Electcl. Instr
Vectron, Inc.
Weksler Thermom. Corp.
Wollensak Optical
Zoomar Corp.

PHOTOMETERS, Micro

Agfa Ansco
Amer. Instr. Co.
Applied Research Labs
Baird-Atomic
Bausch & Lomb
Biddle Co., James G.
Boone Inst
Brinkman Instruments
Bristol Co.
Cambridge Instr. Co.
Dearborn Scientific
Eastman Kodak Co.
El Dorado Electronics
Electronics Corp. of Amer.
Epic, Inc.
Ercona Corp
Ess Instr. Co
Farrand Optical
Ferner Co.
Fischer & Porter Co.
Fish-Schurman
Fisher Scientific
Foxboro Co
Gaertner Scientific
GE
Gordon Enterprises
Gurley, W. & L. E.
Hayes Scientific
Helio Instr. Co.
Henson Co., Fred C.
Hogan Labs
Instrumentation Assoc
Instrument Devel. Labs.
International Devel. Co.
Jarrell-Ash
Kaye Devel. Co
MacBeth Corp
Mfgs. Engrg. & Equipt.
Mason Instr. Co.
Maxson Instr. Div.
Mt. Sopris Instr. Co.
Natl. Spectrographic Labs
Neutronics Research
North Amer. Philips
Ohmart Corp.
Permutit Co.
Pfaltz & Bauer
Phoenix Prec. Instr.
Photo Research Corp.
Photovolt Corp.
Poole Instruments
Prec. Glass Prods. Co.
Prec. Thermom. & Insts
Radioactive Prods., Inc.
Rainhart Co.
Rockwell Engrg. Co.
Scientific Specialties
Sipp-Eastwood
Shepard Labs.
S: inco Div.
Specialized Insts. Corp.
Testing Machines, Inc.
Ultrasonic Engrg. Co.
United Engineers
Vectron, Inc
Weksler Instrument
Welch Mfg. Co., W. M.
Will Corp.
Williams, Brown & Earle
Zeiss, Inc., Carl

PHAZOR PHASE METER

Pat. Pend.



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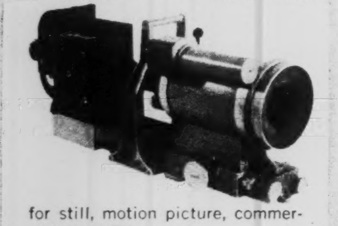

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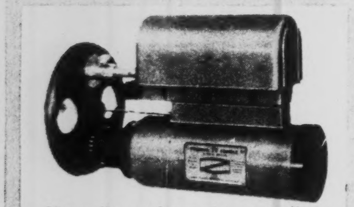

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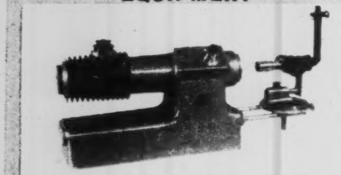

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PHOTOMETERS, Miscellaneous including Bar, Candle, Flame, Flicker, Neutral Wedge, Sphere, etc. see also Illumination Instruments)

Advanced Insts.
Agfa Ansco
Aloe Co., A. S
American Electronics Labs
Amer. Instr. Co.
Amer. Optical
Applied Physics Corp
Avion Div.
Baird-Atomic
Barclay Instr. Div
Bausch & Lomb
Beckman Instruments
Biddle Co., James G
Bristol Co
Central Scientific
Chapman Labs
Coleman Insts., Inc
Davidson Mfg. Co
DeJur Amsco
Dietert Co
Electro-Physics
Electro-Tech Equipt
Ercona Corp.
Fish-Schurman
Gaertner Scientific
Gardner Laboratory
GE, Apparatus Sales
GE, Lamp Dept.
G. M. Laboratories
Hickok Electcl. Instr.
Houston Fearless Corp.
Instrumentation Assoc.
Jarrell-Ash
Kauffman-Lattimer
Kruger Instruments
Laboratory Optical
Leeds & Northrup
Leitz, Inc.
Librascope, Inc
Macalaster Bicknell
MacBeth Corp.
Marion Electcl. Instr.
Meyer Opticraft
North Amer. Philips
Patwin Instrs. Div.
Perkin-Elmer
Pfaltz & Bauer
Phoenix Prec. Instr.
Photo Research
Photovolt Corp.
Prec. Thermom. & Insts.
Process & Instruments
Rockwell Engrg. Co
Rudolph & Sons, O. C.
Scientific Specialties
Servo Corp. of Amer.
Triplett Electcl. Instr.
Ultrasonic Engrg. Co
Welch Mfg. Co., W. M.
Zeiss, Inc., Carl
Zoomar Corp.

PHOTOMETERS, Photoelectric, see Illumination Instruments

PHOTOMETERS, Reflection

Agfa Ansco
Allegany Instr. Co.
Amer. Instr. Co
Bausch & Lomb
Beckman Div.
Bristol Co
Ercona Corp.
Farrand Optical
Fish-Schurman
Gaertner Scientific
Gardner Laboratory
Instrument Devel. Labs
Macbeth Corp.
Minneapolis-Honeywell
  Rubicon Instrs.
Munsell Color Co.
Pfaltz & Bauer
Phoenix Prec. Instr.
Photo Res. Corp.
Photovolt Corp.
Rudolph & Sons, O. C
Welch Mfg. Co., W. M.
Zeiss, Inc., Carl
Zoomar Corp.

PHOTOMETERS, Spectro, see Spectrophotometers

PHOTOMETERS, Ultraviolet

Agfa Ansco
Basic Controls, Inc
Bausch & Lomb
Beckman Div
Burt Scientific Labs
El Dorado Electronics
Farrand Optical
GE
Gaertner Scientific
Jarrell-Ash
Kruger Insts., Harold
Leeds & Northrup
Mine Safety Appliances
Minneapolis-Honeywell
  Rubicon Instrs.
Neutronics Research
Perkin-Elmer
Pfaltz & Bauer
Photovolt Corp.
Process & Instruments
Rudolph & Sons, O. C.
Servo Corp. of Amer.
Welch Mfg. Co., W. M.
Zeiss, Inc., Carl

PHOTO-MICROGRAPHIC EQUIPMENT, see Microscopes

PHOTOTUBES and PHOTOCELLS, see Tubes, Photosensitive

PHYSICAL TESTING MACHINES for Compression and Tension, see Testing Machines, Universal

PICKUPS, see Object of Measurement (Displacement, Speed, Temperature, etc.)

PICKUPS, Crystal, see Crystals

PICKUPS, Capacitance Type, see Displacement Pickups, Capacitance Type

PICKUPS, Differential Transformer, see Displacement Pickups, Differential Transformer

PICKUPS, Magnetic and Reluctance, see Displacement Pickups Magnetic

PICKUPS, Motion, see Displacement Pickups

PICKUPS, Potentiometer, see Potentiometer (Resistor), also Displacement Pickups

PICKUPS, Potentiometer, see Potentiometer (Resistor), also Displacement Pickups

PICKUPS, Photoelectric, see Photoelectric Cells, also Tubes, Photosensitive

PICKUPS, Radiation Sensitive, see Radiation Pickups

PICKUPS, Resistive, see Potentiometers (Resistors), also Displacement Pickups

PICKUPS, Thermocouple-type, see Thermocouples

PIEZOMETERS

Darley & Co., W. S
Kistler Instr. Co.

PILOT LIGHTS, including Instrument Lighting Systems

Aerolite Electronics
Alden Products
Alfa Amer. Corp.
Allen-Bradley Co
Amer. Kloeckner-Moeller
Amglo Corp.
Amperite Co.
Automatic Electric
Blue M Electric
Bodnar Industries
Cinch Mfg. Co
Circon Component Co.
Croname, Inc.
Cutler-Hammer
Dialight Corp.
Drake Mfg. Co.
Eldema Corp.
Electro-Snap Switch
Federal Screw Prods. Co
Foxboro Co.
Furnace Elect. Co.
General Control
GE Apparatus Sales
GE, Lamp Div
Gervos Instruments
Gothard Mfg. Co.
Hart Mfg. Co.
Hetherington Inc.
Industrial Devices, Inc
Johnson Co., E. F
Kirkland Co., H. R
Kulka Electric
Lewyt Corp.
Lindly & Co.
Littelfuse
Mallory & Co., P. R
Marco Industries
Miller Dial & Name Pl
Molded Insulation
National Carbon
National Tel-Tronics
Nelson Electric Mfg
Newark Electric Co
Panelit, Inc.
Rodale Mfg. Co.
Rohm & Haas
SCAM Instr. Co
Signal Indicator Corp
Sittler Corp
Swanson Engrg. & Mfg. Co
Sylvania Elect. Prods.
Taylor Instr. Cos.
Ucinite Co
Universal Aviation Equipt.
Waldorf Inst. Co
Waltham Precision Tool
Westinghouse Electric

PILOTS, Automatic, see Aircraft Instruments

PINIONS, Precision, see Gears

PIPE FITTINGS, see Fittings

PIPE LOCATORS, see Metal Detectors

PIPE and TUBE TESTING MACHINES

Alloy Tube Div.
Baldwin-Lima-Hamilton
Black & Decker
Branson Instruments
Dillon & Co
Geotechnical Corp.
Hacker & Co.
Industrial Engrg. Corp
Kahn & Co.
King Tester Corp.
Krouse Testing Mach
Lenox Instrument Co
Magnaflux Corp.
Metrol, Inc
Nuclear Research
Olsen Testing Machine
Riehle Div.
Steel City Testing Machs
Whittington Pump

PIPELINE INSTRUMENTS, see Gas Distribution

PIPETTES, see Laboratory Apparatus

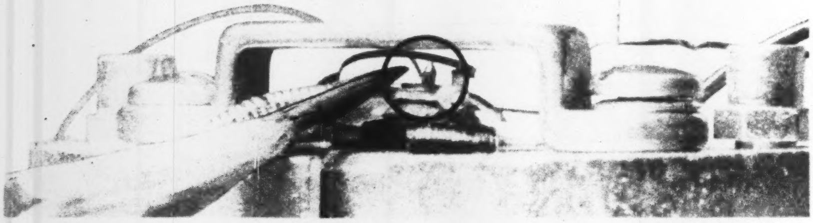
PISTON RING TESTERS, see Dimensional Gages

PITOT—PITOT-STATIC TUBES, Special, Aircraft Engine Testing, see Aircraft Instruments

PITOT TUBE METERS, see Flowmeters, Inferential

PITOT TUBES

Aero Research Instr. Co
Aerotech Specialties
Airflo Instr. Co
Amer. Meter Co.
Askania Reg. Co
Bacharach Indust. Instr.
Bailey Meter Co.
Bendix, Eclipse-Pioneer
Bendix-Friez
Barton Instr. Co.
Braun Corp.
Bristol Co
Cambridge Instr. Co
Central Scientific
Consolidated Avionics
Custom Scientific Insts
Detender Instr. & Reg
Dwyer Mfg. Co.
Ellison Draft Gage Co
Flow Corp.
Foxboro Co.
Gar Prec. Parts



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Hagan Chem. & Controls
Harco Labs.
Hays Corp.
Hill & Co., E. Vernon
Illinois Testing Labs.
Industrial Instr. Corp.
Kollsman Instr. Corp.
Leupold & Stevens
Manning, Maxwell & Moore
Mason-Neilan Div.
Meriam Instr. Co.
Minneapolis-Honeywell
Moore Products
Penn Ind. Instr. Div.
Pitometer Log Corp.
Prec. Thermom. & Insts.
Precision Tube Co.
Republic Flow Meters
Research Appliance Co
Revere Corp. of Amer.
Simplex Valve & Meter
Task Corp.
Trimount Instr. Co.

PIVOTS, Instrument

Acme Industrial Co.
Allied Products Div.
American Laubscher
Baker & Co., Inc.
Bayside Watch Tool
Chelsea Clock Co.
Duotone Co.
Elgin National Watch
Engis Equipment Co.
Fansteel Metallurgical
Ferner Co.
Gatti, Inc., A. M.
Gurley, W. & L. E.
Hamilton Watch Co.
Haynes Stellite Co.
Herman, Victor George
Howard Clock Prods.
Imetra Co., Ltd.
Industrial Jewel Bearing
Instr. Devel. & Mfg.
Instrument Parts Corp.
Instrument Prods. Corp.
Johnson Engrg. Co.
Keller, Jr., Hugo P.
Landis & Gyr
Meikle Mfg. Co.
Miniature Prec. Bearings
Moser Jewel Co.
New Hampshire Ball Bgs
Parisian Novelty Co.
Permo, Inc.
Precision Mfg. Co.
Precision Products Co
Preco Co.
Simpson Electric
Specialty Screw Mach.
Sphinx Amer. Co.
Springfield Instr. Bear.
Stafford Co.
Steel Co., Herman D.
Swiss Jewel Co.
Swissomatic Prods.
Taylor Pivot Co.
Tech Oil Tool Corp.
Tetrad Co.
Topp Industries
Torrington Co.
Triplex Machine Tool
Vallorbs Jewel Co.
Western Automatic Mach.
Whittington Pump & Eng.
Wilder, Inc., R. S.
Worley Jewel Co.

PLANE TABLES, see Surveying Instruments

PLANIMETERS, Automatic Flow Recording

Builders-Providence
Librascope, Inc.
Los Angeles Scient. Inst.
Minneapolis-Honeywell
Robertson, J. L.

PLANIMETERS, Linear and/or Radial (see also Integrators)

Amer. Meter Co.
B-I-F Industries
Bacharach Indust. Instr.
Bailey Meter Co.
Berger & Sons
Bruning Co., Inc.
Calif. Tech. Indus.
Dietzgen Co.
Foxboro Co.
Keuffel & Esser
Librascope, Inc.

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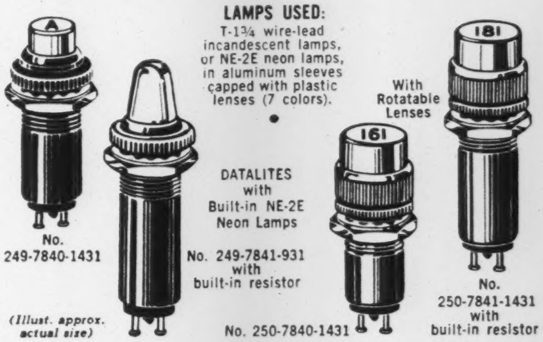
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No. 249-7841-931 with built-in resistor
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No. 250-7840-1431
181
With Rotatable Lenses
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DATALITES have fully insulated terminals and conform to all applicable military specifications. Integrated units are available *with or without built-in resistors.* The cylindrical lenses can be hot-stamped with digits, letters, etc. Complete details in *Brochure L-160.* Send for it now.

SAMPLES ON REQUEST—AT ONCE—NO CHARGE

Foremost Manufacturer of Pilot Lights
DIALIGHT
CORPORATION

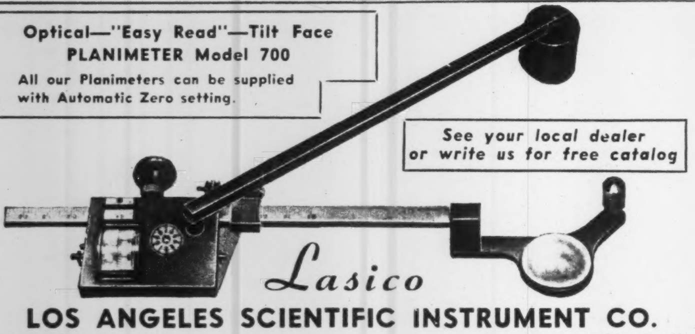
42 STEWART AVE., BROOKLYN 37, N. Y. • HYacinth 7-7600

For more information circle **209** on inquiry card.

Optical—"Easy Read"—Tilt Face PLANIMETER Model 700

All our Planimeters can be supplied with Automatic Zero setting.

See your local dealer or write us for free catalog



Lasico

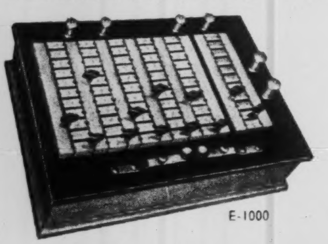
LOS ANGELES SCIENTIFIC INSTRUMENT CO.

2451 Riverside Drive Los Angeles 39, Calif.

The only U. S. manufacturer of complete planimeter line. Also repair service on all makes.

For more information circle **210** on inquiry card.

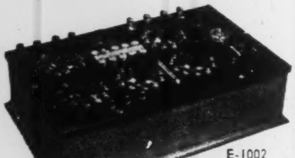
PRECISION INSTRUMENTS FOR STANDARDIZING LABORATORIES



E-1000

RESISTANCE STDS.
BU. of STD. and
REICHANSTALT TYPE

ANTHONY PATTERN WHEATSTONE BRIDGE



E-1002

MUELLER BRIDGE FOR PRECISE TEMPERATURE MEASUREMENTS WITH PLATINUM RESISTANCE THERMOMETERS

LABORATORY AND DEFLECTION POTENTIOMETERS

VOLTAGE DIVIDERS
UNIVERSAL RATIO SETS
TRANSMITTER & RESOLVER BRIDGES

SEND FOR OUR BULLETINS

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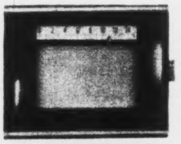
For more information circle **211** on inquiry card.

Potentiometers, Electronic, Round and Strip Chart

Bristol Electronic Dynamaster (R) Potentiometers will measure, record, or automatically control any variable that can be translated into an electrical quantity (d-c current, d-c voltage, capacitance, or resistance).

Offered in indicating, recording (up to 24 records on same chart), and controlling. All types of control: air operated, electric, electronic program control.



Write for Bulletin P1245A

BRISTOL COMPANY

112 Bristol Rd., Waterbury 20, Conn.

For more information circle **212** on inquiry card.

Los Angeles Scient. Inst
Opplem Co., Inc.
Pacific Transducer Corp
Physics Research
Serdex, Inc.
Speidel & Co.
United States Blue Print
Warren-Knight
Weber Co.
White Co., David

PLANIMETERS, Square Root

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Bailey Meter Co
Dietzgen Co
Foxboro Co.
Keuffel & Esser
Librascope, Inc
Los Angeles Scient. Inst
Opplem Co. Inc
Penn Insts. Div.
Speidel & Co.
Taylor Instr. Cos
Weber & Co.
White Co., David

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Ann Arbor Instr. Works
Atlantic Research Corp
Atlas Electric Devices
Brabender Instrs
Burrell Corp.
Bush Associates, G. F
Custom Scientific Insts
Dietert Co
Dillon & Co
Ferner Co.
Gardner Lab.
Gordon Co., Claud S
Humboldt Mfg. Co.
Instron Engrg. Corp
Magnaflux Corp
Moore Co., H. R.
Munsell Color Co
Olsen Testing Machine
Precision Scientific
Research Appliance Co
Scott Testers, Inc.
Steel City Testing
Sweets Co., Martin
Taber Instr. Co.
Testing Machines, Inc
Torsion Balance Co.
U. S. Testing Co
Universal Aviation
Wilson Mech. Instr. Div

PLASTIMETERS

Brabender Instrs
Fischer & Porter
Scott Testers, Inc
Testing Machines, Inc

PLATES, Name, see Nameplates

PLATINUM, Sheet, Foil, Gauze, Wire, etc., see Precious Metals

PLOTTER-FOLLOWERS see Curve Followers, also X-Y Recorders, also Data Processing

PLUG-IN CIRCUITS and COMPONENTS, see Circuits, Plug-In

PLUGS, JACKS and RECEPTACLES, see Connectors

PLUMB BOBS

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Engis Equipt. Co.
Garlynn Engrg. Co.
Graf-Apsco
Gurley, W. & L. E.
Keuffel & Esser
Leupold & Stevens
Lufkin Rule Co
Millers Falls Co.
Post Co., Frederick
Speidel & Co.
Starrett Co.
Suverkrop Instruments
Ulmer Co., J. C.
Warren-Knight
Weber Co.
White Co., David

POINTER STOPS

American Lava Corp
Centralab Div
Stupakoff Div.
Uniform Tubes

POINTER PULLERS

Gustafson Mfg
Mansfield & Green
Marsh Corp., Jas. P
Weksler Instruments

POINTERS and DIALS, FLUORESCENT, see Dials and Pointers, Fluorescent

POINTERS, Instrument

Ackerman Engravers
Allied Engraving
Allied Products Div
Anderson & Sons
Burlington Instr. Co
Can. Radium & Uranium
Carroll Co
Croname, Inc
Dale Products
Dimco-Gray
Edna Lite Co.
Electric Tachometer Corp
Federal Screw Prods
Grammes & Sons
Howard Clock
Marsh Corp., Jas. P.
Maryland Etching Co
Miller Dial & Name Pl
Parisian Novelty Co.
Phaostron Co.
Photo Chemical Prods
Precision Mfg. Co.
Precision Prods. Co.
Precision Tube Co
Preis Engrav. Mach.
Sampson Chem. & Pigm
Scientific Instr. Co
Sillcocks-Miller
Superior Tube Co
Torrington Co.
Trerice Co., H. O
Uniform Tubes
Vallorbs Jewel Co
Waldom Electronics
Winn, Inc., J. H

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Applied Physics Corp
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Bausch & Lomb
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Ercona Corp.
Fish-Schurman
Gaertner Scientific
Hacker, & Co., W. J
Jarrell-Ash
Koehler Instr. Co
Leitz, Inc.
Opplem Co., Inc.
Pfaltz & Bauer
Polarizing Instr. Co
RCA
Rudolph & Sons
Sargent & Co.
Standard Polarimeter Co
Zeiss, Inc., Carl

POLARISCOPE TUBES, see Tubes, Polariscope

POLARISCOPES, including Photo elasticity, Wool Testing

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Bausch & Lomb
Central Scientific
Chapman Labs.
Fish-Schurman
General Radio
Gaertner Scientific
International Devel. Co.
Jarrell-Ash
Kollmorgen Optical
Lab. Optical Co
MB Mfg. Co.
Meyer Opticraft
Optical Devel. Corp.
Pacific Transducer Corp
QOS Corp.
Penn Optical & Instr
Pfaltz & Bauer
Polarized Light-Photo Co
Polarizing Instr. Co.
Precision Scientific
Prec. Thermom. & Insts
Regal Instr. Co.
Ronar, Inc.
Rudolph & Sons
Welch Mfg. Co., W. M
Zeiss, Inc., Carl

POLARITY INDICATORS (see also Phase)

Căl-Tronics Corp.
Gaertner Scientific
HD Electric
Pacific Transducer Corp
Triplett Electcl. Instr.
Weston Instrs.

POLARIZERS, Light

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Bausch & Lomb
Eastman Kodak Co
Edmund Scientific
Enteco Industries
Gaertner Scientific
Green Rectifier
International Optical
Lab. Optical Co.
Merry Instr. Co
Meyer Opticraft
Opplem Co., Inc
Perkin-Elmer
Phoenix Prec. Inst
Polarizing Instr. Co
Polaroid Corp.
Regal Instr. Co.
Rudolph & Sons
Tiffen Marketing

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Dearborn Scientific
Enteco Industries
Fish-Schurman
Gaertner Scientific
Graf-Apsco
Internat. Optical
Merry Instr. Co.
Opplem Co., Inc.
Pacific Transducer Corp
Polarizing Instr. Co.
Regal Instr. Co.
Rudolph & Sons
Tiffen Marketing
Zeiss, Inc., Carl

POLISHING MACHINES, see Machines, Polishing

POLYGRAPHS

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Electro-Medical Labs.
Geotechnical Corp
Gorrell & Gorrell
Instrumentation Assoc.
Lafayette Instr. Co.
Process & Instruments
Stoelting Co.

PORCELAIN DIAPHRAGMS (for Electrodes)

Centralab Div.
Fish-Schurman
General Ceramics
Superior Steatite

PORCELAIN, Laboratory, see Laboratory Apparatus

PORCELAIN PRODUCTS

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Brazilian Trading Co
Centralab Div.
Dearborn Scientific
Du-Co Ceramics
Fish-Schurman
General Ceramics
Ipsen Industries
Johnson Co., E. F.
Laboratory Equipt. Corp
Lapp Insulator Co.
Manhattan Dial Mfg.
McDanel Refr. Porcelain
O'Hara Waltham Mfg.
Saxonburg Ceramics
Selas Corp. of Amer.
Seton Name Plate
Stupakoff Div.
Superior Steatite
Technical Soldering Co
Thermo Materials, Inc
Thor Ceramics, Inc.
U. S. Stoneware Co.

POROSITY TESTERS

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Atmosphere Control
Ferner Co.
Fisher Scientific
General Mills, Inc.
Greiner, Emil
Gurley, W. & L. E.
Koehler Instr. Co.
Magnaflux Corp.
Nuclear Research
Perkins & Son
Poole Instruments, Inc.
Precision Scientific
Refinery Supply Co
Ruska Instr. Co.
Saxl Instr. Co.
Special Instrs. Lab
Testing Machines, Inc.
Thwing-Albert
U. S. Testing Co.
Westinghouse Electric
Whittington Pump
Williams Apparatus Co.

POROUS WARE FOR ELECTROLYSIS

Fish-Schurman
Kontes Glass
Saxonburg Ceramics

POSITION INDICATORS and or RECORDERS, see Displacement

POSITIONERS, Digital, see Servomechanisms, Digital

POSTS, BINDING, see Connectors

POTENTIAL DETECTORS (see also Voltmeters, also Electrometers)

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Burton Mfg. Co
Consolidated Avionics
Donner Scientific
Feller Engrg. Co
GE
Georator Corp.
Hickok Elec. Instr.
Industrial Test. Equipt
Littelfuse Inc.
Peschel Electronics
Sensitive Res. Instr.
Varo Mfg. Co.
WacLine, Inc.
Westinghouse Electric

POTENTIAL DIVIDERS, see Potentiometers (Resistors)

POTENTIOMETERS, Manually-balanced

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AiResearch Mfg. Co.
Allegany Instr. Co.
B & H Instr. Co.
Barber-Colman
Bristol Co.
Bruno-N. Y. Indus.
Cal-Ohm Labs.
Centralab Div.
Clarostat Mfg. Co.
Dale Products
Daystrom-Pacific
DeJur Amsco Corp.
Donner Scientific
Edcliff Instruments
Electro Measurements, Inc.
Electromath Corp.
Electro-Mec Laboratory
Fisher Research Lab.
Foxboro Co.
Gray Instr. Co.
Howell Instr. Co.
Jatco Services, Inc.
K-F Devel. Co.
Leeds & Northrup
Lewis Engrg. Co.
Minneapolis-Honeywell
  Indust. Div.
  Rubicon Instrs.
Muirhead Instrument
Osborne Electric
Physics Res. Labs., Inc.
Pimex, Inc.
Precision Line, Inc.
Samarius Electronics
Tech Labs., Inc.
Technique Associates
Thermo-Electric Co.
Thwing-Albert
Weston Instrs.
Williamson Devel. Co

POTENTIOMETERS, Self-Balancing, Automatic Control, Indicating and or Recording (see also Bridges)

Ace Electronics
Allen-Bradley
American Electronics
Amer. Instr. Co
Arma Div.
Automatic Control
B & H Instr. Co.
Bailey Meter Co.
Baldwin-Lima-Hamilton
Barber-Colman
Beckman & Whitley
Bendix Aviation
Black, Sivalls & Bryson
Borg Corp.
Bristol Co.
Burton Mfg.
Cal-Ohm Labs.
Cambridge Instr. Co.
Centralab Div.
Clarostat Mfg. Co.
Coleman Electcl. Co.
Corbett Science Labs.
Dickson Co.
Distillation Products
Donner Scientific
Edcliff Instruments
Edin Electronics
Electrical Devel. Co.
Electro-Mech Lab.
Electronic Associates
Electronic Prods. Co.
Endevco Corp.
Engrg. Enterprises
Epic, Inc.
Ess Instr. Co.
Feedback Controls
Feller Engrg. Co.
Fielden Instr. Div.
Foxboro Co.
General Controls Co.
GE, Apparatus Sales
Geophysical Instr. Corp.
Georator Corp.
Geotechnical Corp.
Giannini & Co.
Gilmore Industries
Gordon Co., Claud S
Gray Instr. Co
Greenleaf Mfg. Co
Gyromechanisms, Inc.
Hellige, Inc..
Howell Instr. Co.
Humphrey, Inc.
Industrial Control Co
Indust. Electronic Engrs.
Industronics
J-B-T Instruments
Jarvis Electronics
Land-Air, Inc.
Larson Instr. Co.
Lear, Inc.
Leeds & Northrup
Lewis Engrg. Co.
Manning, Maxwell & Moore
Mason Neilan Div.
Miller M. C.
Minneapolis-Honeywell,
  Industrial Div.
  Rubicon Instrs.
Non-Linear Systems
Norden-Ketay
North Atlantic Indust.
Opplem Co., Inc.
Pacific Scientific
Performance Measur. Corp.
Phoenix Prec. Inst.
Precise Measmts. Co.
Reed Research
Rex Rheostat
Robertshaw-Fulton
Sargent & Co.
Schwien Engrg. Co.
Sensitive Research Instr.
Servomechanisms, Inc.
Servonic Instruments
Simpson Electric
Sound Apparatus
Southwestern Indust. Instr.
Spence Engrg. Co.
Summers Gyroscope
Tech Labs., Inc.
Thermo-Electric Co.
Thwing-Albert
Topp Industries
United Optical Mfg.
Varian Assocs.
Welch Mfg. Co., W. M.
West Instr. Corp.
Weston Instrs.
Westronics, Inc.
Wheelco Instr. Div.
Williamson Devel.
Yardney Engrg.

POTENTIOMETERS (Resistors), Linear Motion, see Displacement Pickups

POTENTIOMETERS, (Resistors), Linear and Non-Linear, Precision

Accuracy, Inc.
Ace Electronics
Ace Electronics Assoc. Inc.
Aero Electronics (Calif.)
Affiliated Gas Equipt. Co
Alina Corp.
Allen-Bradley Co.
Amer. British Electric
Amer. Electronics
Amer. Instr. Co
Analogue Controls, Inc.
Anton Electronic Labs.
Arma Div.
Avion Instr. Co.
B & H Instr. Co.
Bailey Meter Co.
Benson-Lehner
Black, Sivalls & Bryson
Borg Corp.
Bourns Labs.
Bristol Co.
Burton Mfg.
Cal-Ohm Labs.
Carter Mfg. Co.
Chicago Aerial Industs.
Chicago Indust. Instr.
Chicago Telephone Sup.
Circuit Insts., Inc.
Clarostat Mfg. Co.
Colvin Labs., Inc.
Computer Insts. Corp.
Corbett Science Labs.
Dale Products
Daven Co.
Daystrom Instrument
Daystrom Pacific
DeJur-Amsco
Edcliff Instruments
Electrical Devel. Co.
Electromath Corp.
Electro Measmts., Inc.
Electro-Mec Laboratory
Electronic Associates
Elektro-Serv Co.
Engrg. & Res. Corp.
Fairchild Conts. Corp.
Feedback Controls
Fielden Instr. Div.
Ford Engrg. Co.
Ford Instr. Co.
Gamewell Co.
General Controls Co.
General Radio
Genisco, Inc.
Giannini & Co.
Gray Instr. Co.
Gyromechanisms, Inc.
Handley Electronics
Helipot Div.
Howell Instr. Co.
Humphrey, Inc.
Hycor Co., Inc.
International Resistance
Jarvis Electronics
K-F Devel. Co.
Kearfott Co.
Lectronic Research
Leeds & Northrup
Librascope, Inc.
Litton Inds., Cmpnts Div.
Magnavox Co.
Minco Products
Miniature Electr. Comp. Co
Minneapolis-Honeywell
  Rubicon Instrs.
Norden-Ketay
Osborne Electric
Pacific Scientific
Paul & Stein Bros
Perkin-Elmer
Precision Line Inc.
Precision Resistance
Radiaphone Co
Retron Corp.
Rex Rheostat
Rinco, Inc.
Samarius Electronics
San Fernando Elect. Mfg.
Servomechanisms, Inc.
Servo Systems
Servonic Instruments
Servonics, Inc.
Servotrol Co.
Shallcross Mfg. Co
Specialties, Inc.
Spectrol Corp.
Spectrol Electronics Div.
Tech Labs., Inc.
Technology Instr. Div.
Technology Instrs. Corp.
Topp Industries
United Optical
Vacuum Film Products
Vectron, Inc.
Waters Mfg., Inc.
West Instr. Corp.

POTENTIOMETERS (Resistors), Low Torque

Accuracy, Inc.
Affiliated Gas Equipt. Co
Alina Corp.
Allen-Bradley Co
Analogue Controls, Inc.
Anton Electronic Labs
B & H Instr. Co.
Cal-Ohm Labs.
Carter Mfg. Co.
Centralab Div.
Chicago Aerial Indust.
Circuit Insts. Inc.
Clarostat Mfg. Co
Computer Insts. Corp.
Corbett Scient. Labs.
Dale Products
Daven Co.
Daystrom-Pacific
DeJur-Amsco
Edcliff Instrs.
Electro-Mec Laboratory
Electromath Corp.
Fairchild Conts. Corp.
General Radio Co.
Giannini & Co.
Helipot Div.
Mallory & Co., P. R.
Minco Products, Inc.
Norden-Ketay
Ohmite Mfg. Co.
Osborne Electric
Paul & Stein Bros.
Perkin-Elmer
Precision Line Inc.
Retron Corp.
Rinco, Inc.
Samarius Electronics
San Fernando Elect. Mfg.
Servonics, Inc.
Shallcross Mfg. Co.
Spectrol Electronics Div.
Stackpole Carbon Co.
Tech Labs., Inc.
Vectron, Inc.
Waters Mfg., Inc
Wirt Co.

POTENTIOMETERS (Resistors), Multiturn, Precision

Aero Electronics (Calif.)
Affiliated Gas Equipt. Co.
Analogue Controls, Inc.
B & H Instr. Co.
Borg Equipt. Div.
Bourns Labs.
Cal-Ohm Labs.
Carter Mfg. Corp.
Circuit Insts. Inc.
Clarostat Mfg. Co
Computer Insts. Corp.
Corbett Scient. Labs.
Dale Products
Daystrom Instrument
Daystrom-Pacific
DeJur-Amsco
Dymec, Inc.
Edcliff Insts.
Electromath Corp.
Electro Measmts., Inc.
Engrg. & Res. Corp.
Fairchild Conts. Corp.
Ford Engrg. Co.
General Controls Co.
Giannini & Co.
Helipot Div.
Howell Instr. Co.
International Resistance
Norden-Ketay
Pacific Scient. Co
Perkin-Elmer
Retron Corp.
Rinco, Inc.
Samarius Electronics
San Fernando Elect. Mfg.
Servonics, Inc.
Shallcross Mfg. Co.
Spectrol Electronics Div.
Technology Instrs. Corp.

POTENTIOMETERS (Resistors), Pressurized

Affiliated Gas Equipt. Co.
Analgue Controls
Bristol Co.
Clarostat Mfg. Co.
Computer Insts. Corp.
Dale Products
DeJur Amsco Corp.
Engrg. & Res. Corp.
Fairchild Conts. Corp.
Giannini & Co.
Norden-Ketay
Perkin-Elmer
Precision Line, Inc.
Rex Rheostat
Samarius Electronics
Servonic Instruments
Tech Labs., Inc.
Trans-Sonics, Inc.

POTENTIOMETERS (Resistors); Sine-Cosine

Accuracy, Inc.
Ace Electronics
Affiliated Gas Equipt. Co
Amer. Electronic Co.
Analogue Controls, Inc.
Anton Electronic Labs.
Black, Sivalls & Bryson
Burton Mfg.
Cal-Ohm Labs.
Centralab Div.
Chicago Aerial Indust.
Circuit Insts. Inc.
Clarostat Mfg. Co.
Computer Insts. Corp.
Corbett Science Labs.
Daystrom Instrument
Daystrom-Pacific
DeJur Amsco
Edcliff Instrs.
Electro-Mec Laboratory
Electronic Associates
Elektro-Serv Co.
Engrg. & Res. Corp.
Fairchild Conts. Corp.
Gamewell Co.
Giannini & Co.
Gyromechanisms, Inc.
Helipot Div.
Humphrey, Inc.
Jarvis Electronics
K-F Devel. Co.
Lectronic Res. Labs.
Norden-Ketay
Pacific Scientific
Perkin-Elmer
Precision Line Inc.
Precision Resistance
Rawson Electcl. Instr.
Research Instr. Co.
Samarius Electronics
San Fernando Elect. Mfg.
Servonics, Inc.
Spectrol Corp.
Spectrol Electronics Div.
Tech Labs., Inc.
Technology Instr. Div.
Topp Industries
Vectron, Inc.
Waters Mfg. Inc.

POTENTIOMETERS (Resistors), Single Turn

Accuracy, Inc.
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Allen-Bradley
Analogue Controls, Inc
Arca Regulators
Askania Reg. Co.
Bendix-Pacific
Black, Sivalls & Bryson
Bristol Co
Cal-Ohm Labs.
Carter Mfg. Co
Carter Radio Co.
Centralab Div.
Chicago Aerial Industs.
Chicago Indus. Instr.
Cinema Engrg. Co.
Circuit Insts. Inc.
Clarostat Mfg. Co.
Computer Insts. Corp.
Corbett Scient. Labs.
Dale Products
Daven Co.
Daystrom-Pacific
DeJur-Amsco Corp.
Edcliff Instruments
Electromath Corp.
Electro-Mec Laboratory
Electro Mechanical Div.
Electropot Div.
Engrg. & Res. Corp.
Fairchild Conts. Corp.
Ford Engrg. Co.
Ford Instr. Co.
Galetronics Corp.
Gamewell Co.
GE
General Controls Co
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General Scientific Div.
Genisco, Inc.
Giannini & Co.
Handley Electronics
Hays Corp.
Helipot Div.
Humphrey, Inc.
International Resistance
Jarvis Electronics
K-F Devel Co.
Librascope, Burbank Div
Mallory & Co., P. R.
Minco Products
Norden-Ketay
Ohmite Mfg. Co.
Osborne Electric
Paul & Stein Bros.
Poole Mfg.
Precision Line Inc
Rawson Electrical Instr.
Rex Rheostat
Rinco, Inc.
Samarius Electronics
San Fernando Elect. Mfg.
Servotrol Co.
Shallcross Controls
Shallcross Mfg. Co.
Southw. Ind. Electronics
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Stackpole Carbon
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Technology Instrs. Corp.
Thelen Co.
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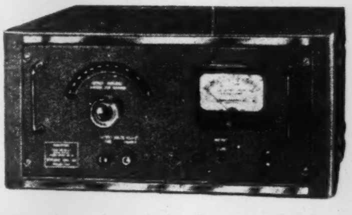
Waters Mfg. Inc.
Wirt Co.

POTTED COMPONENTS, see Circuits, Potted

AC Power Source

THE BEHLMAN
INVERTRON®

A completely electronic source of stable AC power



For research and development, production, test consoles or wherever A.C. Power other than the 60 cycle line is required. Models from milliwatts to kilowatts, subsonic to supersonic frequencies (variable or fixed), single or multiphase output.

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2911 WINONA AVE., BURBANK, CALIF.

For more information circle 213 on inquiry card.

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Biggs Co., Carl H.
Ciba Co., Inc.
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Dow Corning
Eastern Prec. Resistor
Freed Transformer
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Minn. Mining & Mfg.
RHO Engrg. Co.
Stanley Works
Sauereisen Cement Co.
Zophar Mills, Inc.

POWDER METAL PARTS, see Magnetic Materials, also Metals, Powdered

POWER FACTOR INSTRUMENTS (see also Electric Power)

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Amer. Kloeckner-Moeller
Amer. Mach. & Foundry
Boonton Radio
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Cal-Tronics Corp.
Clough-Brengle
Cutler-Hammer
Electronic Instr. Co.
Epic Inc.
Esterline-Angus
Feller Engrg. Co.
Fluke Mfg. Co.
Gates Electronic Co.
General Controls Co.
GE, Apparatus Sales
General Radio
Hickok Electcl. Instr.
Industrial Control Co.
Kin Tel
Knopp, Inc.
Leeds & Northrup
Magnetic Instr. Co.
Physics Research
Roller-Smith
Sangamo Electric
Sensitive Res. Instr.
Shallcross Controls
Sorenson & Co.
Technology Instr. Div.
Triplett Electcl. Instr.
United Optical Mfg.
Voltron Products
Welch Mfg. Co., W. M.
Westinghouse Electric
Weston Insts.

POWER GENERATOR INSTRUMENTS, see Electric Power

POWER LEVEL INDICATORS

Amer. Mach. & Foundry
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Audio Instr. Co.
Boonton Electronics
Boonton Radio
Bristol Co.
Clough-Brengle
Daven Co.
DeJur-Amsco
Electronic Devel. Lab.
F-R Machine
Feller Engrg. Co.
Fluke Mfg. Co.
GE
General Radio
Hickok Electcl. Instr.
Kearfott Co.
Kin Tel
Leeds & Northrup
Marion Electcl. Instr.
Meters, Inc.
Phaostron Co.
Polytechnic Res. & Dev.
RCA Div.
Radio City Products
Reed Research
Sensitive Res. Instr.
Shallcross Mfg. Co.
Sound Apparatus Co.
Triplett Electcl. Instr.
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T28V100ACC	100 Amps (1% Ripple)	795.00
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DC AMP	70VAC 62VAC	140VAC 125VAC	210VAC 185VAC	280VAC 250VAC	420VAC 370VDC	840VAC 750VDC	1120VAC 1000VDC	1400VAC 1250VDC	2800VAC 2500VDC
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3	15.40	17.10	19.00	20.80	37.75	74.30	89.00	99.45	188.00
6	29.75	33.90	37.75	43.90	73.60	149.00	179.00	198.45	372.00
10	36.60	45.75	49.90	61.60					
15	45.90	57.60	63.75	77.75					
24	59.75	72.45	81.60	93.90					
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100	163.75	195.75	239.60	275.90					

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DC AMPS	18VAC 14VDC	36VAC 28VDC	54VAC 42VDC	72VAC 56VDC	130VAC 100VDC	144VAC 118VDC	266VAC 217VDC
1	$ 1.40	$ 2.30	$ 3.45	$ 4.90	$ 8.75	$ 10.65	$ 16.00
2	2.30	3.20	5.25	6.25	11.70	14.00	21.90
4	3.65	7.35	11.40	16.00	24.85	28.50	47.60
6	4.40	8.75	12.75	18.75	32.60	36.00	63.45
12	8.00	15.75	21.95	30.95	45.00	52.50	103.60
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24	16.00	32.00	44.60	57.50	85.00	96.50	188.75
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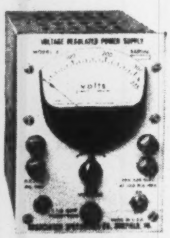

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MODEL 3 CAB. MTG., VOLTMETER	**$69.50**
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DUAL RACK MOUNT FOR MODEL 2 Mounts Two Model 2 Units in 8¾"	**$9.00**

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by Millard H. LaJoy and E. Allen Balliff. ". . . an essential first step in analysis of closed loop controlled processes via frequency response of the system." 1956.

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by A. J. Young, Head of the Central Instrument Laboratory, Imperial Chemical Industries, Ltd.

". . . a MUST for all men who have to do with the automatic control of industrial processes; combines the practical "how" and the theoretical "why"". 1955.

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by Allen L. Chaplin, 1950.

cloth, 4½" x 8", 144 pages Price **$2.00**

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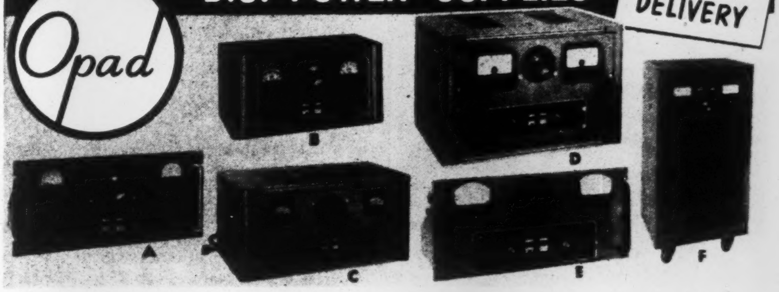


0-32 V.D.C. ½% Ripple

Input: 115 V.A.C. 60 Cycles, Single Phase

Amps.	Model	Style	H	W	D	Fig.
5	KM75	Rack	8¾"	19"	9½"	A
	KM75B	Bench	9"	17"	9½"	B
10	KM81	Rack	8¾"	19"	9½"	A
	KM81B	Bench	9"	17"	9½"	B
20	KM87	Rack	8¾"	19"	9½"	A
	KM87B	Bench	10½"	22"	12"	C
40	KM93	Rack	12¼"	19"	13"	—
	KM93B	Bench	14"	22"	15"	D

FEATURES

- Vacuum Varnish Impregnated Magnetic Components.
- 4½" Rectangular 2% Accuracy, D. C. Panel Meters (3½" on small units).
- Controls include power switch, line and load fuses, pilot light, voltage control knob, output binding posts.
- Low Voltage Regulation: 1/10 Load 36 volts
  Full Load 32 Volts
- Panel Type Carrying Handles.
- Continuous Duty Ratings.

0-32 V.D.C 4% Ripple

Input: 208/220 V.A.C. 60 Cycles, 3 phase

Amps.	Model	Style	H	W	D	Fig.
100	FR100	Floor	46"	22"	18"	F
200	FR200	Floor	46"	22"	24"	F

FEATURES

- Fully Self-Protecting Circuit.
- Pushbutton Operated Magnetic Contactor.
- Indicating Type AC Input Fuses.
- Overcurrent Control in D.C. Circuit.
- Adjustable Thermal Overload Device on Rectifier.
- Overload Warning Light and Reset Button.
- 4½" Rectangular, 2% Accuracy Panel Meters.
- Low Voltage Regulation: Approx. 5-8%.
- Ball Bearing Type Casters.
- Input Receptacle and Mating Plug.
- All receptacles, terminals and controls clearly designated.
- Budget Priced.

0-110 V.D.C. 1% Ripple

Input : 115 V.A.C. 60 Cycles, Single Phase

Amps.	Model	Style	H	W	D	Fig.
2.5	RS10	Rack	8¾"	19"	9½"	A
	RS10B	Bench	10½"	22"	12"	C
5	RS20	Rack	10½"	19"	13½"	A
	RS20B	Bench	12¼"	22"	15"	C
10	RS30	Rack	12¼"	19"	13½"	—
	RS30B	Bench	14"	22"	15"	D
20	RS40	Rack	17½"	19"	13½"	—
	RS40B	Bench	19¼"	22"	15"	—

FEATURES

- Vacuum Varnish Impregnated Magnetic Components
- Non-Aging Rectifiers (Germanium or Silicon).
- 4½" Rectangular 2% Accuracy D.C. Panel Meters (3½" on small units).
- Controls include Power Switch, Input Circuit Breaker, Load Fuse, Pilot Light, Voltage Control Knob and Output Binding Posts.
- Both D.C. Terminals are above ground and isolated from the A.C. Line.
- Panel Type Carrying Handles.
- Convection Cooled Continuous Duty Ratings.

Voltage Regulated Units ±1%

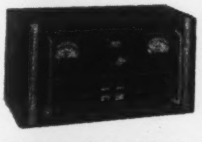
Input: 115 V.A.C. ±10%, 60 Cycles, Single Phase

V.D.C.	Amps,	Model	Style	H	W	D	Fig.
6	20	FP35	Rack	8¾"	19"	9½"	—
	20	FP35B	Bench	10½"	22"	12"	—
0-45	20	LP30	Rack	21"	19"	13½"	—
	20	LP30B	Bench	22¾"	22"	15"	—
0-150	2.5	TM25	Rack	8¾"	19"	9½"	E
	2.5	TM25B	Bench	10½"	22"	12"	E
0-150	5	TM35	Rack	12¼"	19"	13½"	E
	5	TM35B	Bench	14"	22"	15"	E

Ripple at Max. Load 1%
(Except TM25, TM25B .03%)

FEATURES

- Vacuum Varnish Impregnated Magnetic Components.
- Non-Aging Rectifiers (Germanium or Silicon).
- 4½" Rectangular 2% Accuracy D.C. Panel Meters (3½" on small units).
- Controls include Power Switch, Line and Load Fuses, Pilot Light, Voltage Control Knob and Output Binding Posts.
- Both D.C. Terminals are above ground and isolated from the A.C. Line.
- Panel Type Carrying Handles.
- Convection Cooled Continuous Duty Ratings.



GENERAL PURPOSE UNIT

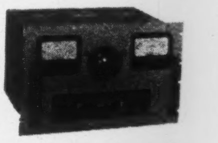
OUTPUT: 0-6 V.D.C., 50 Amps.

INPUT: 115 V.A.C., 60 CPS, 1 Phase

FEATURES: 3½" Meters, 2% Accuracy, Line & Load Fuses, Switch, Pilot Light, Binding Posts.

MODEL GK34 . . . Bench

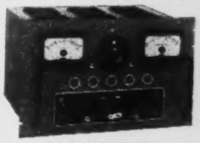
Bulletin No. 178



AIRCRAFT BATTERY SUBSTITUTE

OUTPUT: 0-28 V.D.C., 20 Amps., 1% Ripple.
INPUT: 115 V.A.C., 60 CPS, 1 phase.
REGULATION: 1/10 Load 33 Volts Full Load 28 Volts
FEATURES: Ammeter overcurrent protection circuit prevents needle 'slam' when starting inverters & motors.
MODEL KM88 ...... Rack Mount
MODEL KM88B ...... Bench

Bulletin No. 100



DUAL RANGE POWER SUPPLY

OUTPUT: 0-32/64 V.D.C. 40/20 Amps.
RIPPLE: Within 1% of average D. C.
INPUT: 115 V.A.C., 60 CPS, 1 Phase
FEATURES: Thermal overload protection, indicating line and load fuses, overload warning light, dual range voltmeter.
Model KM95 Rack Mount
Model KM95B Bench

Bulletin No. 103

OPAD ELECTRIC COMPANY

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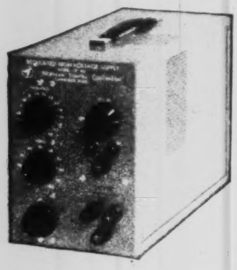
PRECISION SUPPLIES

Portable Pattern



Model	Voltage	Current
RE-1601	200-1600	0-25 Ma
RE-1602	300-1600	0-10 Ma
RE-1901	300-1900	0-25 Ma

Rack Pattern

Model	Voltage	Current
RE-1603	300-1600	0-10 Ma
RE-1610	300-1600	0-100 Ma
RE-2003	500-2000	0-25 Ma
RE-2006	500-2000	0-50 Ma
RE-3002	500-3000	0-20 Ma
RE-3004	500-3000	0-40 Ma
RE-3006	500-3000	0-60 Ma
RE-5001	500-5000	0-10 Ma
RE-5002	500-5000	0-20 Ma
RE-5003	500-5000	0-30 Ma
RE-5502	1000-5500	0-25 Ma
RE-10001	1000-10000	0-10 Ma

Features

Either positive or negative of any supply may be grounded.
Regulation: .01 to .001%
Line Stability: .05 to .005%
Long-term Stability: .01-.05% per hour, about 0.1% per day
Impedance: 1 to 5 Ohms
Ripple: 0.5 to 3 Mv P-P
Standard tubes used

Constant Current Supplies

RI-222E	.01-220 Ma	0-340V

Millimeter Wave Generators

KSG-291	36.2-33.5 kmc	8.3-8.9 mm
KSG-290	33.5-29.7 kmc	8.9-10. mm
KSG-289	30-27.3 kmc	10.-11. mm
KSG-33	25-22 kmc	12.-13.6 mm

Any of these supplies can be modified or special designs built to meet specialized requirements.

Northeast Scientific Corp.
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KATO VARIABLE FREQUENCY MOTOR GENERATOR SETS
For Better Bench Mock-Up Tests!

VARIABLE FREQUENCY MOTOR GENERATOR SETS adjust 360 to 440 CPS. Generator mounted controls include reset buttons, limit switch. Motor and generator remain stationary. Variable drive pulley adjustment is controlled by small motor.

CONTROL PANELS
Synchronous motor starter and generator controls including magnetic amplifier voltage regulator in cabinet.

REMOTE CONTROL
Remote control frequency adjustment varies speed from 1080 to 1320 rpm., thus varying frequency. Bench Mock-Up Test Station may be located anywhere.

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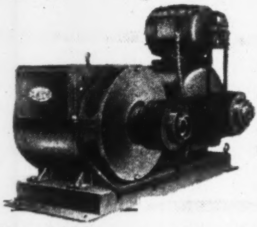
Continuously adjustable, holds speed accurately. Simple hand wheel controls variable-pitch V-belt arrangement permitting the often desired frequencies of 36, 40, 50, 60 and 70 cycles per second. Output indicated by frequency meter. Single, 3 phase or D. C. drive motors available. Also other frequency ranges.



Also 60 CYCLE A.C. GENERATORS from 350 watts to 500 KVA

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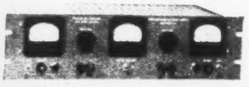
Two outputs, each 5-36 V, 0-1 Amp.

Each regulated, 0.05 V, 0 to full load;

0.15 V per 10% line change.

Electronic over-load protection.



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Output Impedance: 0.05 ohm D.C.

Transient Response: 50 microseconds, typical

Ripple: Less than 2 millivolts RMS

Line Input: 105-125 VAC, 50-400 cycles

For Rack Mounting: Panel 5¼" x 19"; Depth 10"

MODEL UNIREG TQ-36, with meters, for rack mounting **$495.00**

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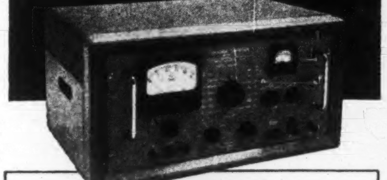

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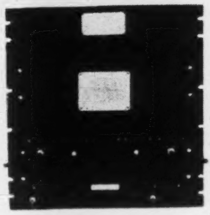
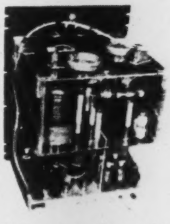
SPELLMAN **HIGH VOLTAGE** POWER SUPPLIES



MODEL LAB-60 RF TYPE
Continuously Variable 0-60 KV DC Regulated Power Supply

Current output 1 ma at 60 KV. 2 ma may be drawn from 50 KV to 0. Supplied with either positive polarity or negative polarity output. Regulation stability—1% at 1 ma 21¾" wide x 22¾" high x 18" deep.

LAB-60 Complete with meter ....695.00 Net
LAB-60 PN Reversible polarity model of above ....$745.00 Net



MODEL LAB-80 REGULATED DC POWER SUPPLY

Continuously variable 0 to 90 KV Power Supply. Output current 1 ma. at 80 KV. 2 ma. from 40 KV down. Voltage regulations better than 1% throughout voltage range. Panel dimensions 19" wide x 26" high x 18" deep.

Rear view—less cabinet

LAB-80 Complete with HV meter ....$900 Net
Specify polarity output—positive or negative

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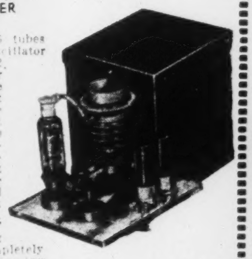
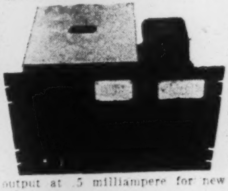
4½ KV POWER SUPPLY



Utilizes two 6AQ5 tubes as a parallel oscillator feeding a 1X2, rectifier tube. For an output voltage of 4½ KV DC at 1 milliampere, the low voltage input requirement is 250 V at 50 milliamperes. By varying the DC input the output voltage can be varied from approx. 1 KV to 7½ KV. Dimensions: 5⅝" high x 5" deep x 4¼" wide. In completely enclosed metal housing. Less low voltage DC supply ....$32.50 Net

MODEL RG-30—Continuously Variable 15-30 KV Regulated DC Power Supply
with regulated focus

Incorporates a voltage tap in the range of 4 to 6 KV for use with 5WP15, 5TP4 and flying spot tubes.



Regulations better than .5% at 1 milliampere. In wide use for color tube development work transcription recording systems. Also available with focus and convergence voltage taps for RCA Tri-Color tubes at slight additional cost. This model can be adjusted for 40 KV output at .5 milliampere for new 40 KV projection tubes.

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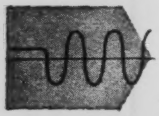

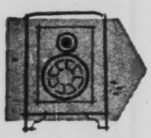

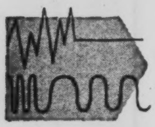

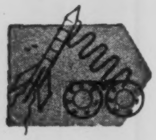

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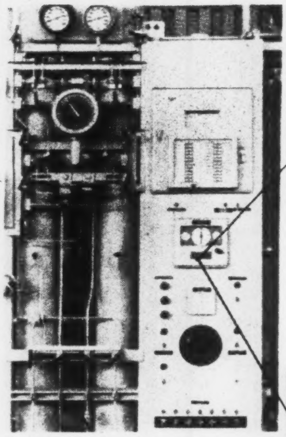

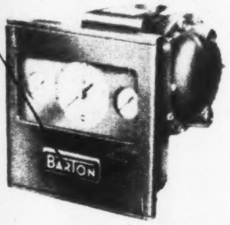

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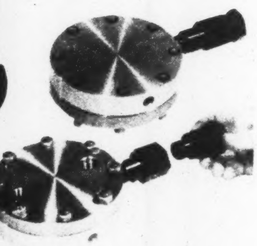

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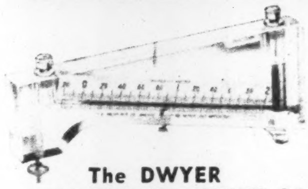

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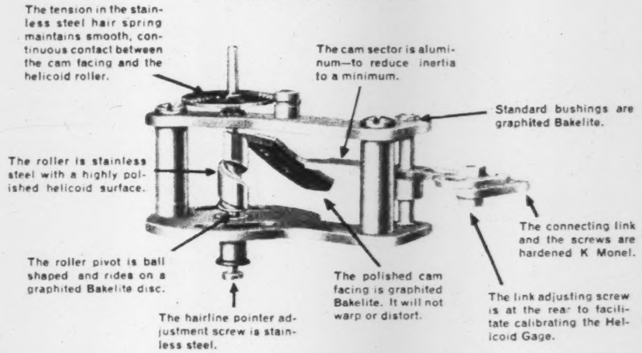
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For complete information on the Helicoid line of gages write for **Catalog G-52**

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ACCO TRADE MARK

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MM MERCURY
0
5
10
15
20
25
30
35
40
45
50

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ABSOLUTE
PRESSURE

From
200
Microns
Up

TYPE
FA-160

...Ranges: 0—50 mm thru 800 mm Hg absolute in six ranges.
...Accuracy: 1 part in 300 over full scale.
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...Available with 2¾" or 6" dia. dial.

Write for Publication No. A-105-r.48-A

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Century Instr. Co.
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Selas Corp.
Seely Instr. Co.
Servonic Instruments
Shallcross Controls
Shand & Jurs
Soreng Products
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Squires Co., C. E.
Sterling Engrg. Co.
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Swartwout Co.
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Taller & Cooper
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Taylor-Emmett Controls
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Todd Scientific
Trerice Co.
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U. S. Gauge Div.
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Wallace & Tiernan
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Westinghouse Air Brake Co.
Weston Hydraulics
Weston Insts.
White-Rodgers Electric
Wiancko Engrg. Co.
Yellow Springs Instr.

PRESSURE DIFFERENTIAL, see Flow or Level

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Amer. Meter Co.
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Barton Instr.
Bendix Aviation Corp.
Bristol Co.
Bendix, Eclipse-Pioneer
Burton Mfg. Co.
Century Electronics
Cleveland Controls
Colvin Labs., Inc.
Consol. Electrodynamics
Control Components Co.
Crescent Engrg. & Res.
Datran Electronics
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Decker Corp.
Dynamic Instr. Co.
Dynametrics Corp.
Edison, Inc., Thomas A.
Fairchild Conts. Corp.
Fischer & Porter Co.
Foxboro Co.
Genisco, Inc.
Giannini & Co.
Gulton Industries
Hagan Chem. & Controls
Handley Electronics
Hastings-Raydist
Hays Corp.
Instruments Inc.
Johnson Service Co.
Kollsman Instr. Corp.
Liquidvision Gauge & Con.
Manning, Maxwell & Moore
Medical Electronics Dev.
Norden-Ketay Corp.
Pace Engrg. Co.
Penn Insts. Div.
Ramapo Engrg. Co.
Reliance Instr. Mfg. Corp.
Republic Flow Meters
Schaevitz Engineering
Seegers Mfg.
Servonic Instruments
Shand & Jurs Co.
Simplex Valve & Meter Co.
Sparling Meter Co.
Sparton Cont. Systems
Statham Instrs.
Swartwout Co.
Taber Instr. Corp.
Taylor Instr. Cos.
Trans-Sonics, Inc.
Uehling Instr. Co.
Ultradyne Engrg. Labs.
United Electric Controls
Wallace & Tiernan, Inc.
Wiancko Engrg. Co.

PRESSURE DIFFERENTIAL TRANSMITTERS, Pneumatic Output

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Amer. Meter Co.
Askania-Werke, A. G.
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Autoclave Engrs.
B-I-F Industries
Bailey Meter Co.
Barton Instr. Corp.
Bristol Co.
Fischer & Porter Co.
Foxboro Co.
Hagan Chem. & Controls
Hays Corp.
Humphreys, Inc.
Indust. Instr. Corp.
Instruments, Inc.
Leslie Co.
Manning, Maxwell & Moore
Mason-Neilan Div.
Minneapolis-Honeywell
  Indust. Div.
Moore Products
Norden-Ketay Corp.
Penn Insts. Div.
Republic Flow Meters
Simplex Valve & Meter Co.
Squires Co., C. E.
Taylor Instr. Cos.
Uehling Instr. Co.
United Electric Controls
Westinghouse Air Brake

PRESSURE EQUIPMENT, HIGH, including Autoclaves

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Artisan Metal Prods.
Autoclave Engrs.
Greiner Co., Emil
High Pressure Equip.
Hoke, Inc.
Nuclear Corp. of Amer.
Nurnberg Thermometer
Parr Instr. Co.
Red Point Corp.
Ruska Instr. Corp.
United Electric Controls
Weston Hydraulics
Wheeler Mfg., C. H.

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Acme Gauge & Instr.
Amer. Chain & Cable
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Authorized Mfrs. Serv.
Autom. Timing & Controls
Automatic Control
Autron Engrg., Inc.
BJ Electronics
Bendix Aviation Corp.
B-I-F Industries
Bailey Meter Co.
Barton Instr. Co.
Bristol Co.
Consol. Electrodynamics
Crosby Valve & Gage
Daytronic Corp.
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Fischer & Porter Co.
Foxboro Co.
Gems Co.
Gilmore Industries
Hays Corp.
Helicoid Gage Div.
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Jerguson Gage
Lonergan Co.
Magnetrol, Inc.
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Marsh Corp.
Marshalltown Mfg. Co.
Mason-Neilan Div.
Meriam Instr. Co.
Minneapolis-Honeywell
Norden-Ketay
Northam Electronics
Petrometer Corp.
Photocon Research
Prec. Thermom. & Insts.
Rochester Mfg. Co.
Scientific Instr. Co.
Sparton Cont. Systems
Trerice Co.
Trimount Instr. Co.
Uehling Instr. Co.
United Electric Controls
United Instr. Co.
U. S. Gauge Div.
Wallace & Tiernan
Wiancko Engrg. Co.

PRESSURE GAGES, Absolute Pressure

Amer. Instrument Co.
Acme Gauge & Instr. Co.
Autom. Timing & Controls
B-I-F Industries
BJ Electronics
Bailey Meter Co.
Barton Instr. Corp.
Bendix, Eclipse-Pioneer
Berkeley Div.
Bristol Co.
Burton Mfg. Co.
Cameron Iron Works
Chatillon & Sons
Cleveland Controls
Consol. Controls Corp.
Consol. Electrodynamics
Consol. Vacuum Corp.
Cook Electric
Crosby Valve & Gage
Datran Electronics
Distillation Products
Ellison Draft Gage Co.
Emery Co., A. H.
Endevco Corp.
Fairchild Conts. Corp.
Fischer & Porter Co.
Foxboro Co.
Fredericks Co., Geo.
GE
Giannini & Co.
Gilmore Industries
Greenleaf Mfg. Co.
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Gulton Industries
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Trerice Co.
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U. S. Gauge Div.
Vacuum-Electron Engrg
Veeco Vacuum Corp.
Wallace & Tiernan
Weksler Instrs.
Weston Instrs.
Wiancko Engrg. Co.

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Autoclave Engrs.
B-I-F Industries
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Bristol Co.
Crosby Valve & Gage
Foxboro Co
Gilmore Industries
Heise Bourdon Tube Co
Helicoid Gage Div.
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Uehling Instr. Co.
United Instr. Co.
U. S. Gauge Div.
Weksler Instrs.

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Ann Arbor Instr. Works
Atlantic Research
Autoclave Engrs.
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Aviation Engrg. Co.
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Baird Atomic
Baldwin-Lima-Hamilton
Barton Instr.
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Bendix-Pacific
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Edison, Inc., Thomas A
Electric Auto-Lite
Electro-Mec Lab.
Electric Prod. Labs
Elematic Equipt. Corp
Ellison Draft Gage
Emery Co., A. H.
Endevco Corp.
Engineering Res. & Devel
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Foxboro Co.
Fredericks Co., George
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Fulton Sylphon Div.
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Gas Appliance Specialties
GE, Apparatus Sales
General Controls
General Physical Lab
Genisco, Inc.
Giannini & Co.
Gilmore Industries
Gordon Co., Claud S
Gulton Industries
H & H Thermostats
Hastings-Raydist
Hathaway Instr. Co
Hays Corp.
Heise Bourdon Tube Co
Helicoid Gage Div.
Herman, Victor George
High Vacuum Equipt.
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Hoke, Inc
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Industrial Instr. Co
Internatoinal Register
Jackson Co., Byron
Johnson Engrg. Co
Kearfott Co., Inc.
King Engrg. Co.
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Kontes Glass
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Logansport Machine
Lonergan Co.
Magnetic Gauge Co
Manning, Maxwell & Moore
Manostat Corp
Mansfield & Green
Marsh Corp., Jas. P
Marshalltown Mfg. Co
Martin-Decker Corp.
Mason-Neilan Div.
Massa Div. of Cohu
Mercoid Corp.
Meriam Instr. Co
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Perfex Corp.
Photocon Research Prods
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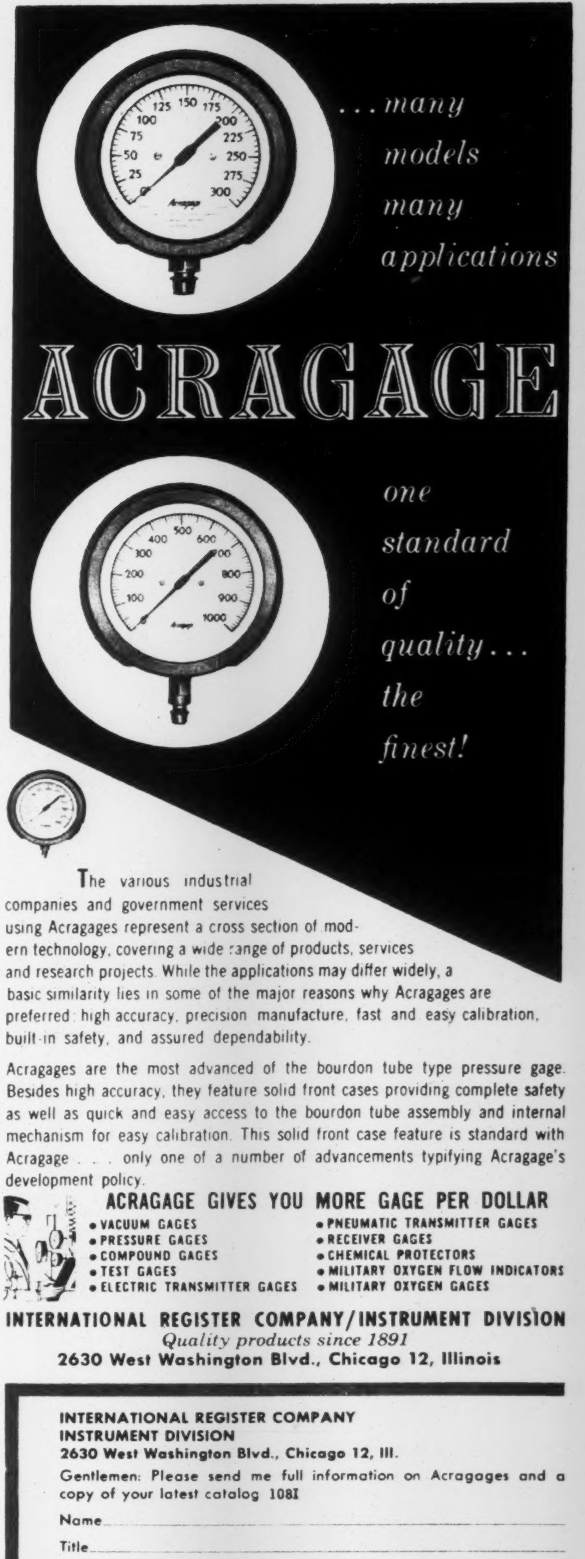

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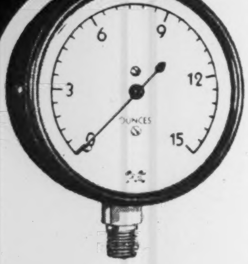
For Accurate Pressure Measurement in Ounces or Inches of Water



Marshalltown Figure 83 is an extremely sensitive gauge that uses a carefully seasoned bronze diaphragm to accurately measure very low pressures. It is used extensively on many types of natural gas installations for checking low pressures.

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Ultradyne Engrg. Labs
United Instr. Co.
U. S. Gauge Div.
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Wabash Metal Prod.
Wagner & Son, Carl H.
Weldmatic Div.
Wallace & Tiernan
Webster Instrument
Weksler Instruments
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Wilgus Mfg. Co.
Winslow Co.

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Diamond Instr. Co
General Control Co
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Giannini & Co.
Gilmore Industries
Grammes & Sons, Inc
Instruments Gear Works
Kollsman Instr. Corp.
Lonergan Co.
Manning, Maxwell & Moore
Marsh Corp., Jas. P.
Martin-Decker Corp
Norden-Ketay Corp
Plumb Co.
Preco Co.
Seegers Mfg. Co
Trerice Co.
U. S. Gauge Div
Wilder, Inc., R. S

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Atlantic Research
Baldwin-Lima-Hamilton
Bourns Labs.
Bristol Co.
Brush Instruments
Cal-Ohm Labs.
Colvin Labs.
Consol. Electrodynamics
Control Engrg. Co.
Cook Electric
Crescent Engrg. & Res. Co
Daven Co.
Daytronic Corp
Dillon & Co., N. C.
Dynamic Instruments
Edcliff Instruments
Edison Inc., Thomas A
Electro-Mec Lab.
Electro Products Lab.
Electronic Engrg. Assocs
Engineering Res. & Devel
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Rahm Instruments
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Schaevitz Engrg.
Scientific Enterprises
Servonic Instruments
Shallcross Controls
Sheffield Corp.
Shepard Labs.
Simpson Electric
Skaneateles Mfg. Co
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Stewart-Warner
Swartwout Co.
Task Corp.
Technology Instrument
Thwing-Albert
Trans-Sonic, Inc.
Trerice Co., H. O
Trimount Instr. Co.
Ultradyne Engrg. Co
U. S. Gauge Div.
Victory Engrg. Co
Waldorf Instr. Co
Weston Instr.
Wheelco Div.

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American Chain & Cable
Amer. Instr. Co.
Amer. Meter Co
Annis Co
Ashton Valve Co
Askania Werke, A. G
Atlas Valve Co.
Autoclave Engrs. Inc
Autom. Temp. Contr. Co
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Baldwin-Lima-Hamilton
Barber-Colman Co
Barton Instr.
Beckman & Whitley, Inc
Bourns Labs.
Bristol Co.
Brooks Engrg. Co.
Builders-Providence
Cambridge Instr. Co
Cameron Iron Works
Century Electronics
Chatillon & Sons
Clark-Cooper Co
Coleman Instruments
Cook Electric
Cox Instruments
Crescent Engrg. & Res
Crosby Valve & Gage
Defender Instr. & Reg
Dickson Co.
Dillon & Co
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Electronics Prods. Co
Elematic Equipt. Corp
Emery Co., A. H.
Endevco Corp.
Esterline-Angus
Fischer & Porter Co
Fisher Governor
Foxboro Co
Gems Co.
General Controls
Giannini & Co
Gilmore Industries
Gotham Instr. Co.
Hagan Chem. & Control
Hathaway Instr. Co.
Hays Corp.
Heise Bourdon Tube Co
Helicoid Gage Div.
Indikon Co.
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Indust. Instr. Corp.
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Kistler Instr. Co
Kollsman Instr. Co
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Linde Co.
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Mansfield & Green
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Minneapolis-Honeywell
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RCA Div.
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Rochester Mfg. Co.
Ruge Assocs.
Ruska Instr. Corp.
Schaevitz Engineering
Scientific Instr. Co.
Servonic Instruments
Sheffield Corp.
Star-Martin Gage Co
Statham Labs
Streeter-Amet
Studebaker Hydraulic Prods
Swartwout Co.
Taber Instr. Corp.
Taylor Instr. Cos.
Trerice Co.
United Electric
United Instr. Co.
U. S. Gauge Div.
Weksler Instrs
Weston Instrs
Wiancko Engrg. Co.

PRESSURE INDICATORS, Membrane (see also Draft)

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Century Electronics
Chesapeake Instr
Consol. Electrodynamics
Defender Instr. & Reg
Dwyer Mfg.
Edcliff Instruments
Ellison Draft Gage Co.
Hays Corp.
Henschel Corp.
Penn Insts. Div.
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Ruska Instr. Corp.
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Bristol Series 500 Gauges come in a very wide variety of models for recording and controlling pressure, draft, vacuum, absolute pressure, liquid level in ranges from 0 to 6 mm of mercury absolute, full vacuum, and from 0 to 5 in. water to 10,000 psi.

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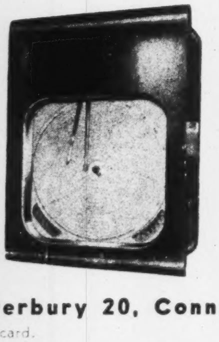

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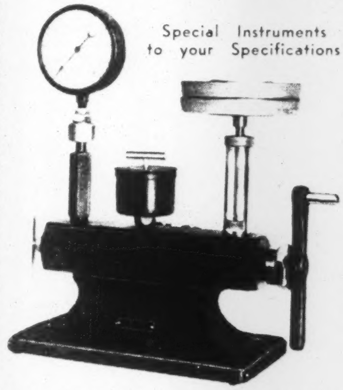

Cook Electric
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Kistler Instr. Co.
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PRESSURE INDICATORS
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Atlantic Research Corp
Brush Electronics
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Chesapeake Instr. Corp
Control Devices
Crystal Research Labs
Dyna Empire, Inc.
Endevco Corp.
Gulton Industries
Kistler Instr. Co.
Martin-Hubbard Corp
Massa Div. of Cohu
RCA Div.
Scott, Inc., H. H.

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Chatillon & Sons
Coleman Instr. & Mfg
Cox Instruments
Dillon & Co.
Gems Co.
Gilmore Industries
Hagan Chem. & Controls
Ideal Lab. Tool
Industrial Electronics
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Mansfield & Green
Republic Flow Meters
Webster Instr. Inc.

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B-I-F Industries
Bendix-Friez
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Scientific Instr. Co.
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Single-tube, Liquid Column, see Manometers

PRESSURE INDICATORS
U-tube, see Manometers

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Amthor Testing Instr. Co
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Chatillon & Sons
Coleman Instruments
Consol. Electrodynamics
Crosby Valve & Gage
Custom Scientific
Darley Co., W. S.
Daytronic Corp.
Defender Instr. & Reg
Dynametrics Corp
Eastern Specialty
GE
Gilmore Instruments
Gordon Co., Claud S.
Grove Valve & Reg. Co
Ideal-Aerosmith
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Manning, Maxwell & Moore
Mansfield & Green
Marshalltown Mfg. Co.
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Myer Corp.
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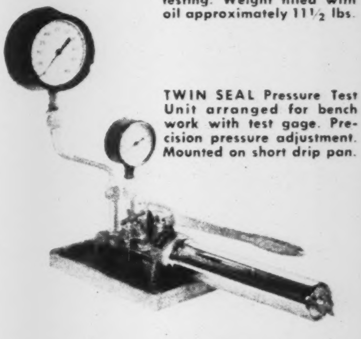
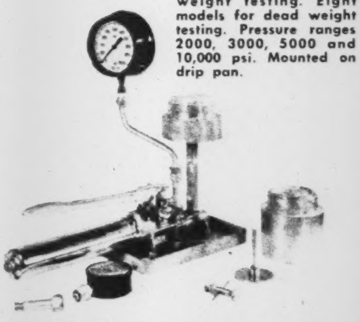
Pump suitable for any pressure to 10,000 psi. Complete fittings to service all pressure instruments.

TWIN SEAL Pressure Test Unit arranged for portable testing. Weight filled with oil approximately 11½ lbs.



TWIN SEAL Pressure Test Unit arranged for bench work with test gage. Precision pressure adjustment. Mounted on short drip pan.



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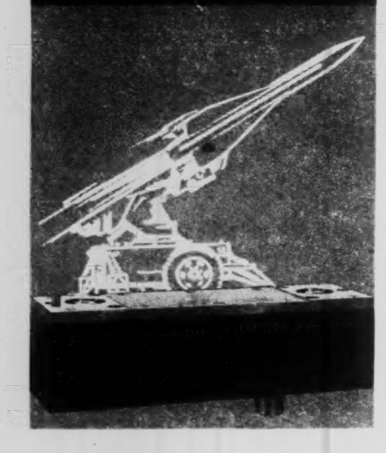
MODEL H-42

HIGH PRESSURE TRANSDUCER



In each Hawk missile launcher developed by Northrop Aircraft Inc., two Servonic H-42 pressure transducers provide damping in the servo systems which operate the azimuth and elevation controls. A radar impulse furnishes guidance and slews the missile carriage to the proper position for launch. The Servonic transducer senses the pending oscillation in the hydraulic system due to the inertia of the moving mass and applies a correction signal to the servo amplifiers controlling hydraulic pressure so that each oscillation is counteracted. This provides a stable motion as the platform is brought to rest in the correct firing attitude.

The use of the H-42 in the Hawk launcher servo systems is typical of the many application capabilities of Servonic pressure transducers in extreme environmental situations.

H-42 SPECIFICS:

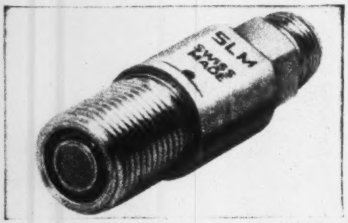
Range: ±4,000 psid.
Linearity: ±0.5%.
Hysteresis: Less than 1%.
Resolution: 0.2%.
Vibration Effects: Less than 1% at 20g.
Shock: 30g.

Complete Details in
Technical Bulletin SI-581

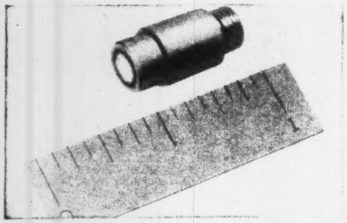
SERVONIC
INSTRUMENTS, INC.
640 Terminal Way
Costa Mesa, California

For more information circle **239** on inquiry card.

NEW PRODUCT NEWS



Model PZ-14



Model PZ-6

Single Kistler Transducer Measures Pressures, Rates, Forces and Acceleration

Precise measurements of diverse pressures, pressure rates, differential pressures, forces, vibration and acceleration can now be made with one Kistler SLM Transducer.

Providing advanced instrumentation for engines, compressors, shock tubes, gun tubes, rockets, hydraulic and pneumatic systems, the self-generating, crystal-type *SLM Pressure Pickup (Model PZ-14)* performs as follows: Measures pressure or pressure rate *directly;* displays all pressures from full vacuum to 3000 psi (100,000 psi with adaptors); covers frequency range of 0 to 50,000 cps; operates continuously at 600° F; withstands intermittent gas temperatures to 3000° F; indicates .1 psi variations at any pressure level to 3000 psi; measures fast pressure transients; makes short term measurements of static pressures. The *SLM Miniature Pickup (Model PZ-6),* of the same basic design as the *PZ-14 Pickup,* achieves response times approaching one microsecond.

Transient differential pressures can be measured precisely at distant points by using two SLM Pressure Pickups opposite polarity. When pickup cables are joined, signals automatically add or subtract. An Accelerometer Adaptor with a mass, spring-loaded against the crystals, converts the standard SLM Pickup into a precision *Acceleration-Vibration Indicator.* Static calibration is accomplished by turning it upside down in the earth's gravity field, generating a 2G signal.

Utilizing a *Force Adaptor,* the SLM Pickup precisely measures forces to 300 lbs. with less than .005" deflection, and .1 lb. variations at any level. Larger forces may be accommodated by using several pickups with their signal leads joined.

SLM Pickups are coupled to oscilloscopes or recorders with electrostatic amplifiers *e.g.* Kistler Piezo-Calibrator-Amplifier units. A new Amplifier-Calibrator (Model PT-14), single or two-channel rack mounted, has fast response (0 to 200,000 cps), high gain (20), and low output impedance (7000 ohms). For complete information, request Bulletin S-114.

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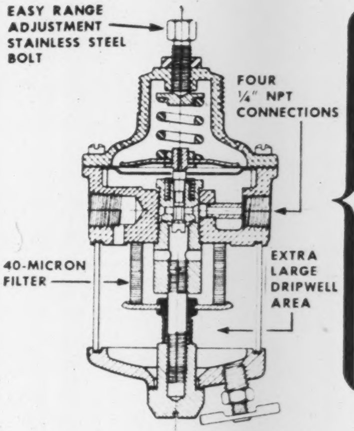

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Electro Prods. Labs.
Electronic Engrg. Assocs
Electronics Devel. Lab.
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Baldwin-Lima-Hamilton
Barton Instr
Beckman & Whitley
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Bourns Labs
Bridgeport Thermostat
Bristol Co.
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Epic, Inc.
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Foxboro Co.
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Mason-Neilan Div.
Matisa Equipt. Corp.
Minneapolis-Honeywell
Indust. Div.
Moeller Instr. Co
Moore Products
Nankervis Co
Penn Insts. Div.
Powers Reg. Co.
Republic Flow Meters
Sanborn Co.
Schaevitz Engineering
Scientific Instr. Co.
Sheffield Corp.
Simplex Valve & Meter Co.
Sparling Meter Co.
Stoelting Co
Streeter-Amet
Summers Gyroscope
Swartwout Co
Taller & Cooper
Taylor Instr. Cos
Thrush & Co.
Topp **Industries**
Trerice Co.
Uehling Instr. Co
U. S. Gauge Div.
Weksler Instrs
Weston Instrs

PRESSURE RECORDERS, Electrical-resistance

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Allied Products Div.
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Baldwin-Lima-Hamilton
Barber-Colman
Bourns Labs.
Bristol Co.
Cal-Ohm Labs
Cons. Electrodynamics
Electronic Engrg. Assocs
Fischer & Porter
Foxboro Co.
Gilmore Industries
Hamilton Watch
Indikon Co.
Indust. Instr. Co
Kybernetes Corp.
Larson Instr. Co.
Martin-Decker Corp.
Republic Flow Meters
Streeter-Amet
Swartwout Co.
Taber Instr. Corp.
Weston Instrs

PRESSURE RECORDERS, Piezolectric

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Atlantic Research
Brush Instruments
Chesapeake Instr. Corp.
Control Devices, Inc.
Endevco Corp.
Kistler Instr. Corp.
Massa Div. of Cohu
RCA Div.

PRESSURE RECORDERS, Piston, Spring or Weight-loaded

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Bailey Meter Co
Baldwin-Lima-Hamilton
Bristol Co.
Brush Instruments
Century Instr. Co.
Chatillon & Sons
Cook Electric
Cox Instruments
Defender Instr. & Reg
Electric Auto-Lite
Engineering Res. & Devel.
Epic Inc.
Fischer & Porter Co
G. M. Mfg. Co.
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Gilmore Industries
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Moore Products
Penn Insts. Div.
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Ruge Assocs.
Scientific Instr. Co.
Sheffield Corp.
Statham Labs.
Streeter-Amet
Summers Gyroscope
Thwing-Albert
Trimount Instr. Co
Yellow Springs Instr. Co

PRESSURE REDUCING VALVES, see Valves, Pressure Reducing and or Backpressure

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Airmatic Valve, Inc.
Amer. Meter Co.
Askania Reg. Co
Askania-Werke, A. G.
Assoc. Valve & Engrg
Automatic Control
Bastion-Blessing
Bellofram Corp.
Bellows Co.
Bendix Aviation Corp.
Black, Sivalls & Bryson
Bristol Co.

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Editor, Instruments & Automation

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Chapter
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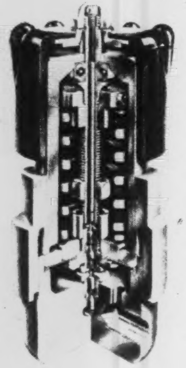

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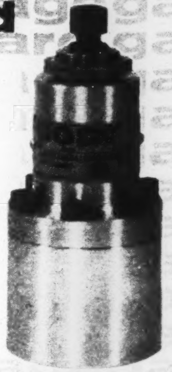

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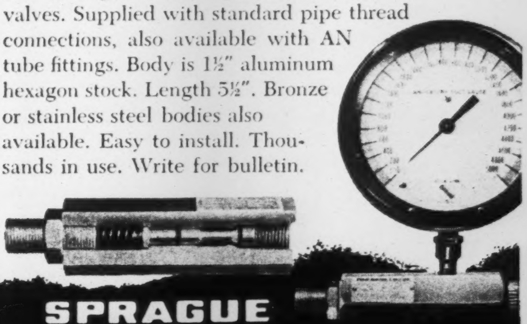

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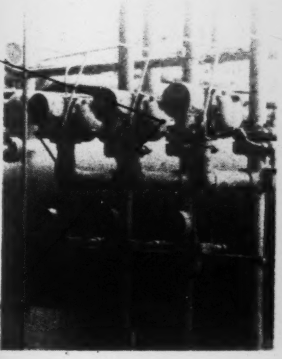

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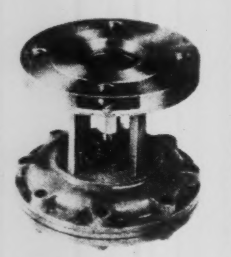

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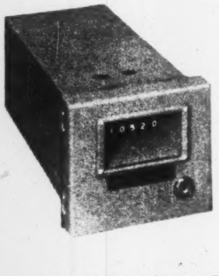

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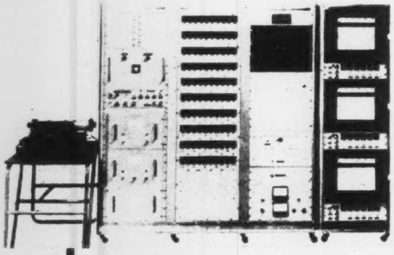

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Zoomar Corp.

PROJECTORS, Oscillogram

Consol. Electrodynamics
Corbett Science Labs.
Geotechnical Corp
Gordon Enterprises
International Devel. Co.
Radioactive Products Co.
Telecomputing Corp

PROJECTORS, Rectifying

Abrams Instr. Co.
Bausch & Lomb
Fecker, Inc., J. W
Gordon Enterprises
Mast Devel

PRONY BRAKES, Hydraulic

Post Co., Frederick
GE, Apparatus Sales
Taylor Dynamometer

PROPELLER TEST STANDS

Acme Gauge
Airplane Mfg. & Supply
Baldwin-Lima Hamilton
Berkeley Div.
Brown & Sharpe
Falstrom Co.
Gadgets Inc.
Gilmore Industries
Industrial Engrg. Corp
Kahn & Con.

PROPORTIONING PUMPS, see Pumps, Metering and Proportioning

PROSPECTING INSTRUMENTS, see Geophysical

PROTRACTORS, Bevel, see Drawing Instruments

PROTRACTORS, Course, see Navigational Instruments

PROTRACTORS, Navigator's, see Navigational Instruments

PROTRACTORS Transparent, see Drawing Instruments

PROVERS, Gas Meter, see Flow Provers

PROVING RINGS, see Testing Machine Calibrators

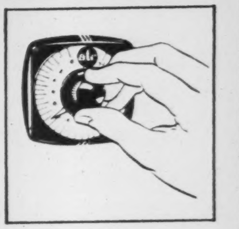
PSYCHOLOGY LABORATORY APPARATUS (see also Polygraphs)

Amer. Electronic Labs
Associated Research
Baird-Atomic
Brush Instruments
Cal-Ohm Labs.
Electro-Mechanical Dev.
Electro-Medical Lab
Electro-Physics Co.
Electrosig Corp
General Radio Co
Gorrell & Gorrell
Hunter Mfg. Co., Inc
Industrial Control Co
Instrumentation Assoc.
Lab-Tronics
Lafayette Instr. Co
Macbeth Corp.
Martin-Hubbard
Medical Electronics Dev
Nelson Instr. Co.
Phipps & Bird
Scott, Hermon H
Stoelting Co
U. S. Testing Co
Yellow Springs Instr. Co

PSYCHROMETERS, see Humidity Instruments, Psychrometric

PUBLIC HEALTH TESTING EQUIPMENT

Aloe Co., A. S.
Amer. Optical Co.
Amer. Scientific
Anton Electronic Labs.
Applied Research Labs.
B-I-F Industries
Burton Mfg. Co.
Central Scientific
Chicago Apparatus Co.
Corning Glass Works
Electric Hotpack Co.
Electric Scient. Co.
Fisher Scientific
Genl. Biological Supp
Greiner, Emil
Hellige, Inc.
Hill & Co., E. Vernon
Industrial Control Co.
Instrument Dev. Labs
Instrumentation Assoc.



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ATCOTROL MINIATURE TIMERS

For industrial process, laboratory and machine automation. Accurate, practical, inexpensive. Atcotrol Timers, Series 305, control a-c or d-c loads within variable timed intervals or sequences.

Up to 4 load circuits with more than 147 circuit arrangements. Repeat accuracy to within .25 of 1%. For reset or non-reset operation. Non-slip clutch, no lubrication required. Fast, simple installation, low inventory cost.

Shipped from stock. Prices: approximately $44.00. Discounts for quantity and resale on request.

TO ORDER: Specify 1) Model 305; 2) Voltage and frequency: 115 or 230, 50 or 60 cycles; 3) Dial range: 15, 30, 60, 120, 240 sec or min.

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AUTOMATIC TIMING & CONTROLS, Inc.
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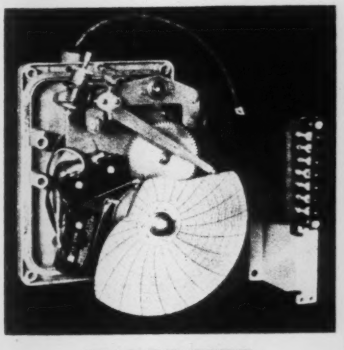
A SUBSIDIARY OF SAFETY INDUSTRIES, INC.
ATC EXPORT DEPT.: 1010 SCHAFF BLDG., PHILADELPHIA 2, PA., U.S.A

For more information circle 253 on inquiry card.



BAILEY
PROGRAM CONTROLLER

- Positions a pneumatic transmitter in accordance with time/amplitude function of a 6-inch diameter cam. This establishes a pneumatic signal which is used as a set point signal to adjust an external control relay.

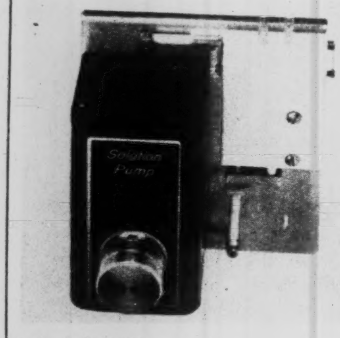
The "plug-in" Program Controller and its pneumatic transmitter may be installed in the same case with one or two electronic or pneumatic receivers.

The Bailey Program Controller also drives a recording pen to record the cam program for comparison on the same chart with the controlled variable.

Request Product Specification E99-6

BAILEY METER COMPANY
1041 IVANHOE ROAD CLEVELAND, O
Bailey Meter Company Ltd., Montreal, Canada

For more information circle 254 on inquiry card.

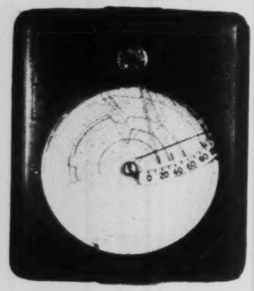


METERING PUMP

Model 103
0 to 2 ml./min.
Accuracy
0.01 ml./min.

HAROLD KRUGER INSTRUMENTS
P.O. Box 164
San Gabriel, California

For more information circle **255** on inquiry card.



BAILEY
Electronic Pyrometer

• This indicating, recording, and controlling Bailey d-c PYROTRON Receiver Recorder is a self-balancing potentiometer which records one to four continuous temperature records on a 12 in. circular chart. It may be furnished with pneumatic or electric control. A themocouple or a radiation unit is the temperature sensitive element.

Minimum maintenance is assured by the elimination of galvanometers, millivolt meters, batteries and standard cells. A reversible electric motor, under electronic control, balances the potentiometer circuit and drives the indicating, recording, and controlling features.

Bailey PYROTRON Receiver Recorders are made up of interchangeable "plug-in" assemblies, standardized so that only a few spare parts need be carried in stock for many instruments.

Request Product Specifications E12-5 and E12-4.

BAILEY METER COMPANY
1041 IVANHOE ROAD · CLEVELAND, O.
Bailey Meter Company Ltd., Montreal, Canada

For more information circle **256** on inquiry card.

Pyrometers, Automatic Controllers, Indicators, Recorders

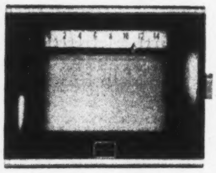
The Bristol line of Pyrometers includes electronic potentiometer, millivoltmeter, thermocouple and radiation types in indicating, single-pen, two-pen and multiple record (up to 24) models.

Strip-and round-chart recorders and automatic controllers are available with any of the following types of control: electric, electronic, or air operated with all types of control actions and as program controllers.

Write for Bulletins P1260, P1245A, P1242, P1244, P1248, and P1238.

BRISTOL COMPANY
112 Bristol Rd., Waterbury 20, Conn.

For more information circle **257** on inquiry card.



Bristol Dynamaster ® Electronic Potentiometer

Kontes Glass
LaMotte Chem. Prods
Lennard Co.
Lumenite Electronic
Menlo Research Lab
Mine Safety Appliance
Nuclear Electronics
Owens Illinois
Phipps & Bird
Phoenix Prec. Inst
Photovolt Corp.
Precision Scientific
Radiation Instr. Dev. Lab
Research Appliance Co
Rubicon Co.
Scientific Glass App.
Scott, Hermon H.
Taylor & Co., W. A.
Technical Associates
Ultra-Violet Prods.
Victoreen Instr. Co.
Wallace & Tiernan, Inc

PULP TESTERS, see Paper and Pulp Testing

PULSATION DAMPERS, see Pressure Snubbers

PULSE GENERATORS, see Generators, Pulse

PULSE TRANSFORMERS, see Transformers, Pulse

PULVERIZED MATERIALS MEASUREMENTS, see Particle Instruments

PUMICE

Dixon, Inc
Jadow, Inc
King-Malcolm
Rhodes & Co
Wagner Co., Inc., C. A.

PUMP GOVERNORS, including Regulators

Acme Reg. Co.
AiResearch Mfg. Co
Allen-Bradley
Area Regulators, Inc
Askania Reg. Co.
Askania-Werke: A. G.
Assoc. Valve & Engrg
Atlas Valve Co.
Autom. Control Co.
Autom. Timing & Controls
B. W. Controller Corp
Bailey Meter Co.
Bastion-Blessing
Beck Co.
Bendix-Friez
Black, Sivalls & Bryson
Block Mfg. Co.
Boekel & Co.
Boylston Co.
Bristol Co.
Builders-Providence
Cash Co., A. W.
Cash Valve Mfg. Corp.
Climax Div.
Conoflow Corp
Continental Foundry
Controls Corp. of Amer
Cooper Co., Clark
Cutler-Hammer
Davis Reg. Co.
Detroit Lubricator
Eclipse Fuel Engrg. Co
Engelhard, Inc., Charles
Farris Engrg. Co.
Fischer & Porter Co
Fisher Governor
Ford Reg. Valve Co
Foster Engrg. Co.
Foxboro Co.
Fulton Sylphon Div.
Furnas Electric
Gas Appliance Spec.
General Controls
GE
General Regulator
Grove Valve & Reg.
H-B Instr. Co.
Hagan Chem & Controls
Hammel-Dahl
Hays Corp.
Henszey Co.
Hoke, Inc.
Ideal Lab. Tool Corp
Industrial Instr
Jack Scientific Co., Bill
Johnson Service Co.
Jordan Reg. Co.
Keckly Co., O. C.
Kaye & MacDonald
Kendall Controls Corp.
Kieley & Mueller
Klipfel Valves
Kollsman Instr. Co
Lammert & Mann
Lapp Insulator
Leslie Co.
Linde Co.
Lumenite Electronic
Magnetic Instr. Co.
Manning, Maxwell & Moore
Marsh Corp.
Mason-Neilan Div.
McAlear Mfg. Co.
McDonnell & Miller, Inc
Mercoid Corp.
Mercon Reg. Co.
Minneapolis-Honeywell
Moore Products
Natural Gas Equipt. Co
Norgen Co., C. A.
North Amer. Mfg. Co
Northern Equipt. Co.
Partlow Corp.
Penn Insts. Div.
Photoswitch, Inc
Powers Reg. Co
Preferred Utilities Mfg
Republic Flow Meters
Research Controls
Reynolds Gas Reg. Co
Sarco Corp.
Schade Valve Mfg.
Schutte & Koerting
Seely Instr. Co.
Selas Corp
Shallcross Controls
Sprague Meter Co
Spence Engrg. Co
Squires Co.
Swartout Co
Taylor Instr. Cos
Trerice Co
Union Switch & Signal
United Electric
Warren Engrg. Co
Warrick, Chas. F.
Water Level Controls
Waukee Engrg
Weston Instrs.
White-Rodgers
Yellow Springs Instr. Co

PUMPS, Compressed Air, see Air Compressors

PUMPS, Glass Cylinder and Piston Type

Bel Art Products
Everett Products
Fairbanks, Morse & Co
Fish-Schurman
Fredericks, George E.
Glasscraft Co.
Kinney Mfg. Div.
Kontes Glass
Lapp Insulator Co
Lear, Inc.
National Instr.
Neptune Pump Mfg
Phila. Pump & Machy.
Prec Glass Prod. Co.
Schaar & Co

PUMPS, High Vacuum, see Vacuum Apparatus

PUMPS, Hydraulic Control

Adel Prec. Prods.
Amer. Instr. Co.
Askania Reg. Co.
Autoclave Engrs.
Barnes Co. W. F. & J.
Bendix, Eclipse-Pioneer
Bendix-Pacific
Brown & Sharpe
Denison Engrg. Co
Dusenbury Co.
ECO Engrg. Co.
Eastern Industs., Inc
Fairbanks, Morse & Co
Ingersoll-Rand
Lapp Insulator Co
Lear, Inc.
Ledeen Mfg. Co
Logeman, C. W.
Milton Roy Co
Pesco Products
Phila. Pump & Machy
Precision Scientific
Pressure Prods. Industries
R. K. L. Valve & Mfg.
Rivett Lathe & Grinder
Rockwell Mfg. Co
Schaar & Co.
Shallcross Controls
Sundstrand Machine Tool
Vickers, Inc
Worthington Corp

PUMPS, Laboratory, High Pressure (25000 psig.)

Amer. Instr. Co.
Autoclave Engrs
Central Scientific Co
Cooper Co., Clark
Fisher Scientific
High Pressure Equipt. Co
Hills-McCanna
Lap Insulator Co.
Ledeen Mfg. Co.
Logeman Co., C. W.
Milton Roy Co
Phila. Pump & Machy
Pressure Prods. Industries
Proportioneers Inc
Ruska Instr. Corp.
Schaar & Co
Sprague Engrg. Corp.
Specialties Inc.
Welch Mfg. Co., W. M.

PUMPS, Metering and Proportioning (see also Flowmeters, Positive Displacement)

Amer. Instr. Co.
Amer. Meter Co.
Autoclave Engrs.
B-I-F Industries
Baltimore Biological Lab
Bowser, Inc.
Bush Assoc., G. F.
Central Scientific
Cooper Co., Clark
Eco Engrg. Co.
Electro Mechanical Dev.
Exline Engrg. Co
Fairbanks, Morse & Co.
Gelber Co.,
Hills-McCanna
Ingersoll-Rand
Lapp Insulator Co.
Logeman Co.
Mechanical Products Corp
Milton Roy Co.
Modern Metalcraft
National Instr. Co.
Neptune Pump
Phila. Pump & Machy.
Phipps & Bird
Pressure Prods. Industries
Process & Instruments
Proportioneers Inc.
R. K. L. Valve & Mfg.
Research Appliance Co.
Roots-Connersville
Ruska Instr. Corp.
Schaar & Co.
Shallcross Controls
Sigmamotor, Inc.
Smith Prec. Prods.
Vanton Pump & Equipt.
Wallace & Tiernan
Whitey Tool & Die

PUMPS, Vacuum, see Vacuum Apparatus

PYCNOMETERS

Ace Glass Co.
Coleman Instr. & Mfg.
Fisher Scientific
G. M. Mfg. Co.
Gardner Lab.
Greiner, Emil
Greiner Glassblowing Lab
Humboldt Mfg. Co.
Kontes Glass
Leeds & Northrup
Martin & Co.
Owens Illinois Glass
Pyrometer Instr. Co.
Rainhart Co.
Rascher & Betzold
Scientific Glass App.
Soiltest, Inc.
Specialty Glass Co.

PYRHELIOMETERS

Bristol Co.
Cambridge Instr. Co.
Eppley Lab
G. M. Mfg. Co.
Instruments Corp.
Kahl Scient. Instr.
Leeds & Northrup
Neutronics Research
Pyrometer Instr. Co.

PYROMETER CALIBRATING SETS

Barber-Colman
Bristol Co.
Cambridge Instr. Co.
DeJur-Amsco
Foxboro Co.
Gray Instr. Co
Illinois Testing Labs
Leeds & Northrup
Lewis Engrg. Co.
Minneapolis-Honeywell
  Rubicon Instrs
Pyrometer Instr. Co.
Servo Corp.
Technique Assocs.
Thermo Electric Co., Inc
Thwing-Albert
West Instr. Corp.
Weston Instrs
Winslow Co.

PYROMETER LEAD WIRE, see Thermocouple Wire and Components

PYROMETER SUPPLIES, see Thermocouple Wire and Components

PYROMETER TUBES, see Thermowells

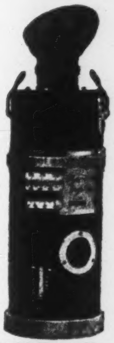
PYROMETERS, Electrical Resistance (see also Temperature)

Arnoux Corp.
Assembly Products
Bailey Meter Co.
Barber-Colman
Bristol Co.
Cambridge Instr. Co
Chicago Indust. Instr. Co
Cleveland Controls
Dickson Co.
Electric Hotpack Co.
Electro-Tech Equip.
Engelhard Co., Inc., Chas
Epic, Inc.
Ferner Co.
Fielden Instr. Div.
Foxboro Co.
GE, Apparatus Sales
Gilmore Industries
Gordon Co., Claud S.
Gray Instr. Co.
Greiner, Emil
Huppert Co.
Illinois Testing Labs.
J-B-T Instr., Inc.
Land-Air, Inc.
Leeds & Northrup
Lewis Engrg. Co.
Minneapolis-Honeywell
  Indust. Div.
  Rubicon Instrs.
Physics Research
Pyrometer Instr. Co
Pyro-Electric
Roller-Smith
Scientific Glass App.
Servo Corp.
Shallcross Mfg.
Simpson Electric
Tell-Tronics Prods
Thermo-Electric Co.
Thwing-Albert
Welch Mfg. Co., W. M.
West Instr. Corp.
Weston Instrs.
Wheelco Instr. Div.
Winslow Co.

PYRO

INSTRUMENTS FOR PRECISION TEMPERATURE MEASUREMENTS

PYRO
Optical Pyrometer



Determines temperatures of minute spots, fast-moving objects and smallest streams—at a glance! No correction charts or accessories needed. Easy to use—weighs only 3 lbs. Special types available to show true spout and pouring temperatures of molten ferrous metal measured in open. Five stock ranges from 1400° F. to 7700° F.

Write for FREE Catalog No. 85.

THE IMPROVED PYRO
Surface Pyrometer

The ideal instrument for all plant and laboratory surface and sub-surface temperature measurements. Available with large selection of thermocouples and extension arms for all jobs. Designed for ruggedness and accuracy . . . it features automatic cold end compensation, large 4¾" direct reading dial and shock, moisture and dust-proofed shielded steel housing. 5 stock ranges 0-300°F. to 0-1200°F.

Ask for catalog No. 168.

PYRO
Radiation Pyrometer

Tells spot temperatures instantly in heat-treating furnaces, kilns forgings and fire boxes. No thermocouples, lead wires or accessories needed! Temperature indicated on direct reading dial at a press of the button. Any operator can use it. Two double-ranges from 1000° F. to 3400° F.

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PYRO
Immersion Pyrometer

The Pyro Immersion Pyrometer is shock proof, moisture proof, dust proof, immune to magnetic influences. Shielded steel housing. Instantly interchangeable thermocouples without adjustment or recalibration. Large 4" scale. Equipped with exclusive **Lock Swivel.** Ranges 0-1000 to 0-2500 F.

Get FREE Catalogue No. 155.

The Pyrometer Instrument Co.

Bergenfield 12, New Jersey

Manufacturers of PYRO Optical, MICRO-OPTICAL, SURFACE, RADIATION, IMMERSION and INDICATING PYROMETERS for over 25 years. Catalogs on request.

For more information circle **258** on inquiry card.

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Assembly Products
Bailey Meter Co.
Bristol Co.
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Defender Instr. & Reg
Epic Inc.
Ferner Co.
Huppert Co
Lewis Engrg. Co
Partlow Corp
Pyrometer Instr. Co
Scientific Instr. Co
Thwing Albert
Weston Instrs.
Wheelco Instr. Div
Wilson Elec. Inst.

PYROMETERS, Millivoltmetric

Assembly Products
Barber-Coleman
Beede Electcl. Instr. Co
Blue M Electric
Bristol Co.
Cambridge Instr. Co
Cleveland Controls
Cybertronic Corp.
De Jur-Amsco
Electric Hotpack Co
Electro-Tech Equip.
Elematic Equipt. Corp
Engelhard, Co., Inc., Chas
Epic, Inc.
Ferner Co., R. Y.
Fielden Instr. Div.
Foxboro Co.
GE Apparatus Sales
Gilmore Industries, Inc
Gordon Co., Claud S.
Gray Instr. Co.
Herman, Victor George
Howell Instr. Co.
Huppert Co.
Illinois Testing Labs
Instrument Lab., Inc.
J-B-T Instruments
Lewis Engrg. Co.
Manning, Maxwell & Moore
Marion Electcl. Instr.
Marshall Co.
McHugh & Son
Meters, Inc.
Minneapolis-Honeywell
  Indust. Div.
  Rubicon Instrs
Pacific Transducer Corp
Pimex, Inc.
Prec. Thermom. & Insts
Pyrometer Instr. Co.
Richards Co., Arklay S
Roller-Smith
Sensitive Res. Instr.
Simpson Electric
Smith Co., Arthur F.
Tamms Silica Co.
Technique Associates
Thermo-Electric Co.
Thermo-Electric Mfg. Co
Thwing-Albert
Tipp-Tronic, Inc.
Welch Mfg. Co., W. M
West Instr. Corp.
Weston Instrs.
Wheelco Instr. Div.
Winslow Co.

PYROMETERS, Optical

Allied Engrg. Div.
Bacharach Indust. Instr
Bronoptics Co.
Burrell Corp.
Cambridge Instr. Co
Dietert Co
Electro-Tech Equipt.
Epic, Inc
Fielden Instr. Div.
Fisher Scientific
Gordon Co., Claud S.
Helio Instr. Co.
Herman, Victor George
Instrument Dev. Labs
Leeds & Northrup
Lewis Engrg. Co.
Mason Instr. Co.
Minneapolis-Honeywell
Pacific Transducer
Perkin-Elmer Corp.
Pimex, Inc.
Pyrometer Instr. Co
Simpson Electric
Thwing-Albert

PYROMETRS, Potentiometric

Bailey Meter Co.
Barber-Coleman
Blue M Electric
Bristol Co.
Cambridge Instr. Co.
Co-design Corp.
DeJur Amsco
Dickson Co
Fielden Instr. Div.
Foxboro Co.
GE. Apparatus Sales
Gordon Co., Claud S
Gray-Instr. Co.
Herman, Victor George
Howell Instr. Co.
Illinois Testing Labs.
Laboratory Optical
Leeds & Northrup
Lewis Engrg. Co.
Land-Air
Manning, Maxwell & Moore
Minneapolis-Honeywell
  Indust. Div.
  Rubicon Instrs
Pyrometer Instr. Co.
Robertshaw-Fulton Co
Simpson Electric
Technique Assocs.
Thermo-Electric Co.
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PYROMETERS

T-E has combined advanced design with quality performance in a wide variety of pyrometric instruments.

Recording Controller

Indicators

Self-balancing, manual-balancing, millivoltmeter. Standard and portable.

Controllers

Indicating, signalling recording.

Recorders

Circular chart-indicating. Standard and portable.

Other T-E Instruments

AutoRef" providing multiple circuit cold-junction compensation • Temperature Monitoring Systems • Thermocouple Calibration Console • Resistance Thermometer Instruments.

Write for Instrument Bulletin FF-1

MINIMITE

PORTABLE INDICATOR
Null Balance, Potentiometer Type

BATTERY
EMF
Thermo Electric
MiniMite
STD
ZERO
RUN
TEST

This compact unit weighs under 4 lbs.—yet it has a 23½ inch double range scale. It can measure temperatures directly, when connected to a thermocouple or calibrate other potentiometer or millivoltmeter-type instruments. Available scales cover temperatures from —300°F. to +3200°F. for all standard T/C materials; millivolt ranges from 0 to 62. Accurate to ¼ of 1% of scale range.

Write for Bulletin 64-FF

Thermo Electric Co. Inc.

Saddle Brook, New Jersey

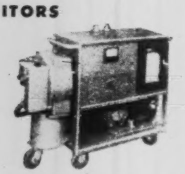
In Canada—Thermo Electric (Canada) Ltd., Brampton, Ont.

For more information circle **259** on inquiry card.

NMC
INDIANAPOLIS

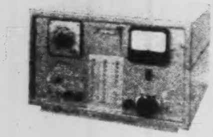
Nuclear Instruments

AIR MONITORS



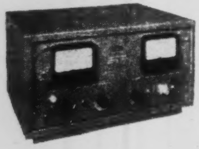
Automatically record and warn of α, β and γ radiation in airborne particles for periods up to one week, unattended. Fixed or moving filters. Standard and custom units or complete systems.

PROPORTIONAL COUNTING SYSTEMS



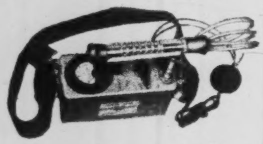
For precision counting of α, β and γ radiation from prepared samples. Ideal for C^{14}, Ca^{45}, P^{32} and H^3. New low power design reduces heat, assures longer life.

COUNT RATEMETERS



Operate GM, scintillation and proportional counting detectors. Equipped to drive recorders and alarms. Logarithmic or linear models for monitoring or laboratory use.

PORTABLE SURVEY METERS



High precision, compact, portable Geiger and scintillation counters. Critical components shock mounted and watertight. For precise laboratory measurement or rugged field use.

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Corp. 2460 N. Arlington Ave.
Phone: Liberty 6-2415
INDIANAPOLIS 18, INDIANA
International Office: 13 E. 40th St., New York 16, N.Y.

For more information circle **260** on inquiry card.

West Instr. Corp.
Weston Instrs.
Wheelco Instr. Dir.

PYROMETERS, Radiation, Indicating, Recording and/or Controlling

Askania-Werke A. G.
Bacharach Indust. Instr.
Bailey Meter Co.
Barber-Colman
Barnes Engrg. Co.
Basic Controls, Inc.
Beede Electel. Instr. Co.
Blue M Electric
Bristol Co.
Cambridge Instr. Co.
Carlingo Commodities
Co-design Corp.
Defender Instr. & Reg.
Electronic Control Corp.
Electronics Corp. of Amer.
Electro-Tech Equip.
Elematic Equipt. Corp.
Engelhard, Co., Inc., Chas.
Epic Inc.
Farnsworth Electronics
Fielden Instr. Div.
Foxboro Co.
GE
Gordon Co., Claud S.
Hagan Chem. & Controls
Hanson-Gorrill-Brian
Herman, Victor George
Illinois Testing Labs.
Leeds & Northrup
Lewis Engrg. Co.
Minneapolis-Honeywell
  Indust. Div.
Olympic Development
Pyrometer Instr. Co.
Servo Corp. of Amer.
Simpson Electric
Thwing-Albert
Warner & Swasey Res.
West Instr. Corp.
Weston Instrs.
Wheelco Instr. Div.
Williamson Devel. Co.

PYROMETERS, Surface, see Thermometers, Surface Controlling

PYROMETERS, Thermo-electric, Indicating, Recording and/or Controlling

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Alden Products
Alfax Paper & Engrg.
Assembly Products
Bacharach Indust. Instr.
Bailey Meter Co.
Barber-Colman
Basic Controls, Inc.
Beck Co.
Beede Electel. Instr.
Blue M Electric
Bristol Co.
Burling Instr. Co.
Burrell Corp.
Cambridge Instr. Co.
Cleveland Controls
Cybertronic Corp.
DeJur-Amsco
Electric Hotpack Co.
Electro-Tech Equip.
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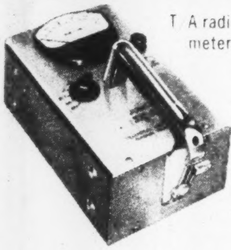

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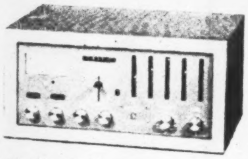

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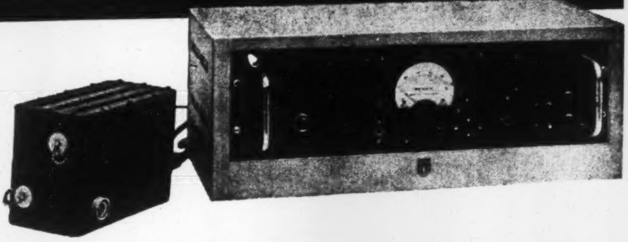

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Simplex Valve & Meter
Sparton Cont. Systems
Sterling Prec. Instr.
Swartwout Co.
Taber Instr. Corp.
West Instr. Corp.
Wheelco Div.

RECEIVER INDICATORS, Pneumatic Signal

Amer. Chain & Cable
Amer. Meter Co.
Askania-Werke, A. G.
B-I-F Industries
Bailey Meter Co.
Bristol Co.
Brooks Rotameter
Crosby Valve & Gage
Ellison Draft Gage Co.
Fischer & Porter Co.
Foxboro Co.
Hagan Chem. & Controls
Hays Corp.
Helicoid Gage Div.
Henschel Corp.
Indust. Instr. Corp.
Infilco Inc.
Johnson Service Co.
Leeds & Northrup
Manning, Maxwell & Moore
Mason-Neilan
Minneapolis-Honeywell
  Indust. Div.
Penn Insts. Div.
Powers Regulator Co.
Schaevitz Engrg.
Scientific Instr. Co.
Seegers Mfg.
Simplex Valve & Meter
Taylor Instr. Cos.
U. S. Gauge Div.

RECEIVER RECORDERS, Electric Signal

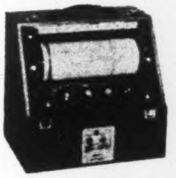
A-V Mfg. Corp.
Alden Elect. & Impulse
Amer. Meter Co.
Askania-Werke, A. G.
B-I-F Industries
Bailey Meter Co.
Bendix-Pacific
Bristol Co.
Brooks Rotameter Co.
Commercial Controls Corp.
Consolidated Avionics
Electronic Tube Corp.
Farnsworth Electronics
Fed. Telephone & Radio
Fischer & Porter Co.
Foxboro Co.
GE Apparatus Sales
Hagan Chem. & Controls
Hays Corp.
Infilco Inc.
Kearfott Co.
Larson Instrument
Leeds & Northrup
Magnecord, Inc.
Manning, Maxwell & Moore
Minneapolis-Honeywell
  Indust. Div.
Penn Insts. Div.
Phoenix Precision Inst.
Photobell Co.
Ramo-Wooldridge
Schaevitz Engrg.
Scientific Instr. Co.
Shand & Jurs
Simplex Valve & Meter
Stoelting Co., C. H.
Swartwout Co.
Taber Instr. Corp.
Taller & Cooper, Inc.
Texas Insts., Inc.

THE MOSELEY

AUTOGRAF X-Y RECORDER

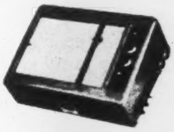
trade mark

& ACCESSORIES



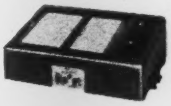
Model 1 AUTOGRAF

A portable drum type X-Y Recorder; accepts 8½"x11" paper; independent servo-actuated drives for each axis; input ranges 5 MV to 100 volts; 200,000 ohms/volt input resistance; less than 1 second plotting speed for full scale travel; ±0.25% accuracy and resolution; available for use as curve follower.



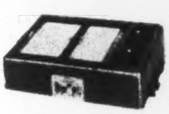
Model 2A AUTOGRAF

Flat-bed bench type X-Y Recorder; accepts up to 11"x17" paper; input ranges 5 MV to 150 volts; input filters; zero offset; built-in vacuum paper hold-down; 200,000 ohms/volt input resistance; less than 1 second plotting speed for full scale travel; inputs for curve follower, point plotter, card or tape translator; ±0.25% accuracy and resolution.



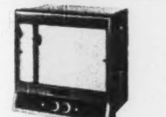
Model 3 AUTOGRAF

Flat-bed table-top X-Y Recorder; accepts 8½"x11" paper; input ranges 5 MV to 500 volts, calibrated or continuous; input filters; zero offset; positive clamp-type paper hold-down; 200,000 ohms/volt input resistance; ½ second plotting speed for full scale travel; ±0.25% accuracy and resolution.



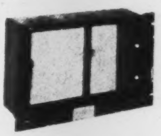
Model 3S AUTOGRAF

Identical to Model 3 except has added feature of a built-in TIME BASE or SWEEP CIRCUIT. Five calibrated time intervals of 5, 10, 50, 100, and 500 seconds for full scale X-axis pen travel (2 inches sec. to 0.2 inches sec.). Combination X-axis range control permits standard two-variable plotting or one variable plotted against time.



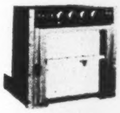
Model 4 AUTOGRAF

Rack mounting X-Y Recorder; vertical flat recording surface; accepts up to 11"x17" paper; built-in vacuum paper hold-down; input ranges 5 MV to 150 volts, calibrated or continuous; input filters; zero offset; 200,000 ohms/volt input resistance; less than 1 second plotting speed for full scale travel; ±0.25% accuracy and resolution; inputs for curve follower, point plotter, card or tape translator; 19¼" panel.



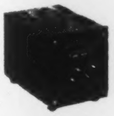
Model 5 AUTOGRAF

Rack mounting X-Y Recorder; vertical flat recording surface; accepts 8½"x11" paper; positive clamp-type paper hold-down; input ranges 5 MV to 500 volts; input filters; zero offset; 200,000 ohms/volt input resistance; ½ second plotting speed for full scale travel; 0.25% accuracy and resolution; 12¼" panel.



Model 6 AUTOGRAF

An AUTOMATIC FRAME ADVANCE X-Y Recorder identical electrically to Models 2A or 4. Features continuous chart roll (approx. 100 charts per roll), automatic, manual, or remote control of chart advance, vacuum paper hold-down, 10" x 10" plotting area completely visible, single chart tear-off or rolled chart storage.



Model F-1

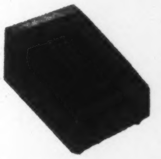
Curve Follower Adaptor

An adaptor unit designed for use directly with Model 2A or 4 AUTOGRAF; converts graphic information to voltage or point form from conducting curves; may also be used with Models 1, 3, and 5 with suitable modification of recorders; 10 inches per second reproducing rate; furnished with all necessary installation accessories.

Type D-1

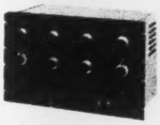
Character Printer

A solenoid-plunger type die replacing pen assembly on a Model 2A AUTOGRAF to permit identification of curves obtained from plotting digital information. Consists of complete kit with instructions for installation and minor recorder wiring changes.



Model 40A Keyboard

Full keyboard type; 30 keys for each axis; also available in 10 key; connects directly to Model 2A and 4 AUTOGRAF; built-in regulated power supply; plots from zero to ±1999 on each axis; 0.10% digital to analog conversion accuracy; special circuits for calibration, error detection, and selection of "hold" or "automatic clear" on each axis.



Model 30A

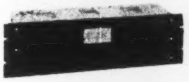
Card Translator

For use with Model 2A or 4 AUTOGRAF to convert output pulses from IBM Summary Punch to analog voltages for automatic plotting; speed of 50 cards per minute, maximum; 10, 20, 50, 100, or 200 counts per inch; calibration by switch or calibrator card; automatic or manual feed; 0.10% accuracy; mounted on 12¼" standard panel, 11½" deep.

Model 50

Tape Translator

For use with Model 2A or 4 AUTOGRAF to plot digital information from perforated paper tape in conjunction with standard tape reader; standard model accepts 1-2-4-8 binary code; other codes available on special order; maximum speed, 60 points per minute; zero offset of 100 to 900 points; plotting scale steps of 10, 20, 50, 100, and 200 points/inch.

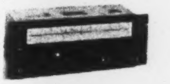


Model 60

Logarithmic

Converter

Converts DC or AC input voltages to DC voltages proportional to the logarithm of the amplitude of the input voltage; self contained power supply; better than 60 db dynamic range; 20 to 20,000 cps; accuracy ±½db; output ranges, 5, 10, 20 db per inch; speed 20 db per second.



Model 20

DC Voltmeter

A high accuracy servo-actuated, multi-range DC Voltmeter with large, easy to read scale; eleven ranges from 3 MV to 300 volts, full scale; internal calibration cell; input resistance, 200,000 ohms/volt up to 30 volt scale, 20,000 ohms/volt on 300 volt scale; zero left and zero center adjustment feature; 0.25% accuracy on all ranges.

Clary Printer and Model C-1 (2, 3)

Accessory Panel

A Clary Printer, Model 1900, is specially wired for use with a Coleman Digitizer and Moseley Accessory Panel to provide "on demand" printed readout of DC signals from the Model 20 DC Voltmeter. Also may be used for readout from shaft rotation. Available for 3, 4, and 5 decade Digitizers.

F. L. MOSELEY CO.

409 N. FAIR OAKS AVE., PASADENA, CALIFORNIA

For more information circle **266** on inquiry card.

U. S. Gauge Div.
West Instr. Corp.
Wheelco Div.

RECEIVER RECORDERS, Pneumatic Signal

Amer. Meter Co.
Askania Werke, A. G.
B-I-F Industries
Bailey Meter Co.
Bristol Co.
Brooks Rotameter Co.
Dickson Co.
Fielden Instr. Div.
Fischer & Porter Co.
Foxboro Co.
Hagan Chem. & Controls
Hays Corp.
Indust. Instr. Corp.
Infilco Inc.
Johnson Service Co.
Leeds & Northrup
Manning, Maxwell, & Moore
Mason-Neilan
Minneapolis-Honeywell
  Indust. Div.
Penn Insts. Div.
Powers Reg. Co.
Schaevitz Engrg.
Scientific Instr. Co.
Simplex Valve & Meter Co.
Stoelting Co.
Taylor Instr. Cos.
U. S. Gauge Div.

RECORDER PENS and STYLI

Acton Labs.
Alden Systems
Amer. Platinum Wks.
Amer. Recording Chart
B-I-F Industries
Baker & Co.
Barton Instr. Corp.
Bristol Co.
Brush Instrs.
Consol. Molded Prods.
Dickson Co.
Edin Co.
Engrg. Enterprises
Everett Prods. Inc.
Farrand Optical
Fielden Instr. Div.
GE
Geotechnical Corp.
Gilmore Industries
Gorrell & Gorrell
Hays Corp.
Heat-Timer Corp.
Hunter Mfg. Co.
Impact Register Co.
Jensen Tool Co.
Kaiser Aircraft & Elect.
Larson Instr. Co.
Leeds & Northrup
Manning, Maxwell & Moore
Moeller Instr. Co.
Nester Co., L. G.
Phipps & Bird, Inc.
Photron Instr. Co.
Sanborn Co.
Scientific Instr. Co.
Stoelting Co.
Swissomatic Products
Trerice Co.
Weksler Instrs.

RECORDERS, Circular Chart (see also Object of Measurement)

Alina Corp.
Amthor Testing
Autom. Timing & Controls
B-I-F Industries
Bailey Meter Co.
Baldwin-Lima-Hamilton
Barton Instr. Corp.
Barber-Colman
Bristol Co.
Defender Instr. & Reg.
Dickson Co.
Edin Co.
Elect. Auto-Lite Co.
Engler Instr. Co.
Ess Instr. Co.
Fielden Instr. Div.
Fischer & Porter Co.
Foxboro Co.
GE Apparatus Sales
General Controls Co.
Gilmore Industries
Hagan Chem. & Controls
Hays Corp.
Johnson Service Co.
Larson Instr. Co.
Leeds & Northrup
Leupold & Stevens
Manning, Maxwell & Moore
Mason-Neilan Div.
Minneapolis-Honeywell
  Indust. Div.
Moeller Instr. Co.
Palmer Thermometers
Partlow Corp.
Penn Insts. Div.
Powers Reg. Co.
Republic Flow Meters
Sangamo Electric
San Jose Scientific
Scientific Instr. Co.
Simplex Valve & Meter
Sparling Meter Co.
Taber Instr. Corp.
Taylor Instr. Cos.
Trerice Co.
U. S. Gauge Div.
Weksler Instrs.
Westinghouse Electric
Weston Instrs.

RECORDERS, Electrosensitive

Alden Electron. & Impulse
Alden Systems Co.
Alfax Paper & Engrg. Co.
Barnes Engrg. Co.
Basic Controls, Inc.
Bendix-Pacific
Bristol Co.
Brush Instruments
Century Electronics & Insts.
Consolidated Avionics
Consol. Electrodynamics
Edin Co.
Electro Instr. Inc.
Electro Medical Lab.
Fischer & Porter
Geotechnical Corp.
Gilmore Industries
Internat. Business Mach.
Lab-Tronics
Larson Instr. Co.
Mid-Century Instr.
Offner Electronics
Photron Instr. Co.
Radiation Inc.
Ram Meter, Inc.
Reeves Instr. Corp.
Scientific Instr. Co.
Stoelting Co.

RECORDERS, Magnetic Tape

Allied Radio Corp.
A-V Mfg. Corp.
American Electronics
Ampex Corp.
Amplifier Corp. of Amer.
ANelex Corp.
Automation Corp. of Amer.
Autonetics Div.
Bell & Howell
Bell Sound Systems
Brush Insturments
Century Electronics & Insts.
Consol. Electrodynamics
Control Data Corp.
Cook Electric
Davies Labs.
Digitronics Corp.
Dukane Corp.
Electro-Techn. Labs.
Electronic Assoc.
Engdahl Enterprises
Epsco, Inc.
Ercona Corp.
Fairchild Recording
Geotechnical Corp.
Gilmore Industries
Hare Co., D. G. C.
Kay Electric
Key Electric
Kinevox Div.
Librascope, Inc.
Magnecord, Inc.
Midwestern Instruments
Mincom Div.
Newark Electric Co.
Northam Electronics
Northrop Anaheim
Potter Instr. Co.
Presto Recording
RCA
Ramo-Wooldridge
Reed Research
Shepard Labs.
Southw. Ind. Electronic
Texas Div., Brush
Texas Insts., Inc.
Vectron, Inc.
Western Electro-Acoustic
  Lab.

RECORDERS, Multipoint

Acton Labs.
Alden Electron. & Impulse
Alden Systems Co.
B-I-F Industries
Baldwin-Lima-Hamilton
Barber-Colman
Bristol Co.
Brush Instruments
Century Electronics
Consolidated Avionics
Consol. Electrodynamics
Engrg. Enterprises
Epic Inc.
Fielden Instr. Div.
Fischer & Porter Co.
Fisher Scientific
Foxboro Co.
Geotechnical Corp.
Gilmore Industries
Hagan Chem. & Controls
Lab-Tronics
Larson Instr. Co.
Leeds & Northrup
Manning, Maxwell & Moore
Mid-Century Instrumatic
Minneapolis-Honeywell
  Indust. Div.
Offner Electronics, Inc.
Panellit, Inc.
Potter Instr. Co.
Radiation Inc.
Reeves Instr. Corp.
Republic Flow Meters
Royson Engrg. Co.
Schaevitz Engineering
Scientific Instr. Co.
Taylor Instr. Cos.
Thwing-Albert
Weston Instrs.

RECORDERS, Numerical Data, see Printers

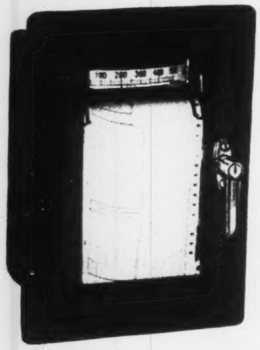
RECORDERS, Operations, see Time Recorders

RECORDERS, Oscillograph, see Oscillographs

RECORDERS, Potentiometer, see Potentiometers

RECORDERS, Strip Chart (see also the Object of Measurement)

Alden Eletron. & Impulse
Alina Corp.
Autom. Timing & Controls
B-I-F Industries



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For Over Fifty Years the Leading Maker of High-Quality, Heavy-Duty, Direct-Writing Pen and Ink Recording Instruments

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Frequency
Power Factor
DC Milliammeters
Kva and Varmeters
Speed
Pressure
Vacuum
Operation (20 Pen)
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Baldwin-Lima-Hamilton
Barber-Colman
Basic Controls
Bendix-Pacific Div.
Berkeley Div.
Bristol Co.
Brush Instruments
Consol. Electrodynamics
Elect. Tachometer Corp.
Engrg. Enterprises
Esterline-Angus Co.
Fischer & Porter Co.
Foxboro Co.
General Controls Co.
GE, Apparatus Sales
Geotechnical Corp.
Gilmore Industries
Heat-Timer Corp.
Hunter Mfg. Co.
Instruments Corp.
Larson Instr. Co.
Leeds & Northrup
Leupold & Stevens
Manning, Maxwell & Moore
Massa Div. of Cohu
Mast Devel.
Menlo Research Lab.
Mid-Century Instrumatic
Minneapolis-Honeywell
  Indust. Div.
Offner Electronics
Orban Co.
Photron Instr. Co.
Pneumafil Corp.
Reeves Instr. Corp.
Republic Flow Meters
Richardson Scale Co.
Schaevitz Engineering
Sheffield Corp.
Simplex Valve & Meter
Sound Apparatus Co.
Sparling Meter Co.
Stoelting Co.
Swartwout Co.
Taylor Instr. Cos.
Tech. Prods. Co.
Texas Insts., Inc.
Thwing-Albert
Times Facsimile Corp.
Varian Assocs.
West Instr. Corp.
Westinghouse Electric
Weston Instrs.
Westronics, Inc.

RECORDERS, X-Y, see X-Y Recorders, also Curve Followers

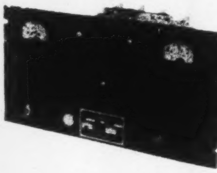
RECORDING HEADS

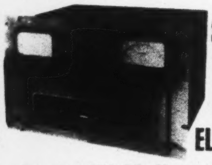
A-V Mfg. Corp.
Aerovox Corp.
American Monarch
Automation Corp. of Amer.
Brush Instrs.
Clevite Elect. Comp.
Control Data Corp.
Cook Electric
Davies Labs. Div.
Edison, Thomas A.
Electro-Mech. Instr.
General Transistor
Gorrell & Gorrell
Librascope, Burbank Div.
Lipps Engrg.
Magnecord, Inc.
Manning, Maxwell & Moore
Midwestern Instruments
Monroe Calc. Mach. Co.
Orban Co., Kurt
Potted Instr. Co.
Southw. Ind. Electronics
Sure Brothers
Traid Corp.
Warren Mfg. Co.

RECORDING PAPERS, see Charts

RECTIFIERS, Dry Disc, including Copper Oxide, Germanium, Selenium, Silicon (see also Rectifiers, Power)

Arnhold Ceramics, Inc.
Audio Devices, Inc.
Automatic Electric
Automatic Mfg.
Bogue Elect. Mfg.
Bradley Labs.
Conant Labs.
Control Corp.
Dearborn Scientific
DeJur-Amsco
Electronic Rectifiers
Electrosig Corp.
Electro-Tech Equip.
Fansteel Metallurgical
Federal Telephone & Radio
GE, Apparatus Sales
GE, Electronics Div.
GE, Low Volt. Switchgr.
Good-All Electric Mfg.
Green Rectifier
Hansen Co., Wm.
Hughes Prods. Div.
I. T. E. Circuit Breaker
International Rectifier
International Resistance
Knopp, Inc.
La Marche Mfg. Co.
Leland, Inc.
Mallory & Co., P. R.
McColpin-Christie
Metal & Thermit
Model Rectifier
Newark Electric Co.
Opad Electric
Pac. Semiconductors, Inc.
Perkin Engrg. Co.
Physics Research Labs.
Pyramid Electric
Radio Corp. of Amer.





GATES SILICON RECTIFIER

SPECIFICATIONS:
INPUT: 115—Volts, 1 Phase, 60 Cycles
OUTPUT: 0.32 Volts D. C. 0-10 Amperes
REGULATION: 5%
RIPPLE: 0.1% R. M. S.
HIGH OVER LOAD CAPACITY 500% 1 Minute 300% 5 Minutes
METERS: 2% Accuracy
DIMENSIONS: 19" Wide x 13" Deep x 10½" High
WEIGHT: 55 lbs.

AIRCRAFT BATTERY ELIMINATOR

Output: 0-30V DC, 20 amps. Ripple: 1%
UNIT CAN BE USED FOR EITHER RACK OR BENCH

GATES ELECTRONIC CO.
2090 Barnes Ave., N. Y. 6, N. Y.
TYrone 2-6490

For more information circle 268 on inquiry card.

Radio Dev. & Res.
Radio Receptor Co.
Rapid Electric
Raytheon Mfg. Co.
Rectico, Inc.
Richardson-Allen
Sarkes Tarzian, Inc.
Schauer Mfg. Corp.
Sel-Rex Corp.
Shasta Div.
Sorenson & Co.
Standard Arcturus Corp.
Standard Elect. Time
Standard Tranformer
Sylvania Elect. Prods.
Syntron Co.
Technic, Inc.
Techn. App. Builders
Texas Insts., Inc.
Transitron Electronic
Union Switch & Signal
U. S. Instr. Corp.
Vickers Elect. Div.
Walker Div.
Westinghouse Electric
Weston Instrs.

RECTIFIERS, High-Vacuum

Allis-Chalmers
Bendix Aviation Corp.
Bradley Labs.
Eitel-McCullough
Fedl. Telephone & Radio
GE, Apparatus Sales
GE, Low Volt. Switchgr.
GE, Power Tube Dept.
Green Rectifier Co.
Industro Transistor Co.
Lewis & Kaufman
Mallory & Co., P. R.
Nuclear Corp. of Amer.
Opad Electric
Philco Corp.
Radio Corp. of Amer.
Raytheon Mfg. Co.
Taylor Tubes, Inc.
Techn. App. Builders
Thermosen, Inc.
Vacuum Tube Prods.
Walker Div.
Wallson Associates

RECTIFIERS, Mercury Vapor

Amperex Electronics
Continental Electric
Eitel-McCullough
Electrosig Corp.
Federal Telephone & Radio
GE, Apparatus Sales
GE, Low Volt. Switchgr.
GE, Tube Dept.
Green Rectifier Co.
National Electronics
Nuclear Corp. of Amer.
Opad Electric
Perkin Engineering
Pioneer Electronics
Raytheon Mfg. Co.
RCA
Richardson-Allen
Sylvania Elect. Prods.
Taylor Tubes, Inc.
Techn. App. Builders
Walker Div.

RECTIFIERS, Power

Airdesign, Inc.
Allis-Chalmers
Amer. Communications
Amer. Transf. Co.
Amplifier Co.
Applied Research Labs.
Automatic Electric
Automatic Mfg.
Bendix, Eclipse-Pioneer
Bogue Elect. Mfg.
Bradley Labs.
Chatham Electronics
Continental Electric
Cutler-Hammer
Dittmore & Freimuth
Eitel-McCullough
Electro Prods. Labs.
Electronic Labs., Inc.
Electronic Rectifiers
Electrons, Inc.
Electrosig Corp.
Electro-Tech Equipt.
Federal Telephone & Radio
Furst Electronics
Gates Electronic Co.
GE, Apparatus Sales
GE, Electronics Div.
GE, Low Volt. Switchgr.
Germanium Prods. Corp.
Good-All Electric Mfg.
Green Rectifier Co.
Heller Co.
Huggins Labs.
I. T. E. Circuit Breaker
International Rectifier
Knopp, Inc.
La Marche Mfg. Co.
Lambda Electronics
Macarr, Inc.
Magnatran Inc.
Magnetic Instr. Co.
Magnetic Res. Corp.
Mallory & Co., P. R.
McColpin-Christie
Mercury Electronic Co.
Model Rectifier
National Electronics
National Spectrographic
New Jersey Electronics
Nuclear Corp. of Amer.
Opad Electric
Pac. Semiconductors, Inc.
Perkin Engrg. Co.
Power Engrg. & Equipt. Co.
RCA Div.
Radio Receptor Co.
Rapidan Electric Co.
Raytheon Mfg. Co.
Research Specialties
Richardson-Allen
Sarkes Tarzian, Inc.
Schauer Mfg. Co.
Sel-Rex Corp.
Servomechanisms, Inc.
Shasta Div.
Standard Arcturus Corp.
Techn. App. Builders
Texas Insts., Inc.
Union Switch & Signal
U. S. Instr. Corp.
Vickers Electric Div.
Walker Div.
Wallson Associates
Westinghouse Electric

RECTIFIERS, Thermionic and Tube

American Communications
Amplifier Co.
Automatic Electric
Baird Atomic
Chatham Electronics
Communication Meas. Lab.
Continental Electric
Dearborn Scientific
DuMont Labs., Inc., A. B.
Electro Prods. Labs.
Electrons, Inc.
Federal Telephone & Radio
Fish-Schurman
Furst Electronics
GE, Apparatus Sales
GE, Low Volt. Switchgr.
Green Rectifier Co.
Heller, Gerald K.
Lambda Electronics
Lewis Kaufman
Magnatran Inc.
Mercury Electronic Co.
National Electronics
NuClear Corp. of Amer.
Opad Electric
Perkin Engrg. Co.
Pioneer Electronics
Process & Instruments
RCA Div.
Raytheon Mfg. Co.
Richardson-Allen
Sylvania Eect. Prods.
Techn. App. Builders
Thermosen, Inc.
Varo Mfg. Co.
Walker Div.
Wallson Associates

REFLECTION METERS, including Reflectometers

Airborne Instruments
American Inst. Co.
Beckman Instr. Div.
Cubic Corp.
Dearborn Scientific
Epic Inc.
Ercrona Corp.
Federal Telephone & Radio
F. R. Machine Works
Fish-Schurman
Gardner Laboratory
GE
Hewlett-Packard
Instrumentation Assoc.
Instrument Devel. Labs.
Leeds & Northrup
Narda Corp.
Pfaltz & Bauer
Photovolt Corp.
Phoenix Prec. Instr.
Raypar, Inc.
Sierra Electronic Corp.
Spencer-Kennedy
Testing Machines, Inc.
Welch Mfg. Co., W. M.
Zeiss, Inc., Carl

REFLECTORS, Including Aspherical, Concave, First Surface, Parabolic and Spherical

Acme Scientific
Ainslie Corp.
Airborne Instruments
Alfa Amer Corp.
Amer. Instr. Co.
Amer. Lens Co.
Amer. Optical Co.
Amglo Corp.
Bache & Co., Semon
Baird Associates-Atomic
Bausch & Lomb
Behm & Sons
Bendix, Eclipse-Pioneer
Beseler Co.
Bray Optical
Bronoptics Co.
Brooks & Perkins
Buhl Optical Co.
Cal-Astro Optical Labs.
Canoga Corp.
Clark & Sons
Commercial Optical
Corning Glass Works
Crystal Research Labs.
Curtis Labs.
Daimo Victor Co.
Davidson Mfg. Co.
Dearborn Scientific
Defiance Engrg. & Merwave
Deknatel & Son
De Mornay-Bonardi
Diamond Antenna & Microwave
E & W Optical
Edmund Scientific
Edna Lite Co.
Electronic Prods. Co.
Emerson & Cuming
Engis Equipt. Co.
Erie Resistor
Esco Prods. Co.
Evap. Metal Films, Inc.
Farrand Optical
Fecker, Inc.
Fish-Schurman
Gaertner Scientific
General Scientific
Georator Corp.
Gordon Enterprises
Green Rectifier
Hayward Scient. Glass
Helio Instr. Co.
Henson Co.
Herron Optical
I. T. E. Circuit Breaker
International Optical
Internat. Devel. Co.
Kearfott Co.
Keller Products
Kuss Industries
Lab. Optical Co.
Laboratory Specialties
Lampkin Labs., Inc.
Lancaster Glass
Leroy Clausing Co.
Lindly & Co.
Lynn, Robert M.
Marsco Mfg. Co.
Merry Instr. Co.
Metavac, Inc.
Nikon, Inc.
Northrop Anaheim
Optical Coating Labs.
Optical Film Engrg.
Optron Laboratory
Pacific Optical
Pacific Univ. Prods.
Palos Optical
Pancro Mirrors, Inc.
Penn Optical & Inst.
Perkin-Elmer
Regal Instr. Co.
Raytheon Mfg. Co.
Sanders Associates
Simpson Optical
Testrite Instr. Co.
Tinsley Labs.
Topp Industries
Unertl Optical
Webber Gage
Weber Bros. Metal Wks.
Zenith Optical Co.
Zenith Optical Lab.

REFLECTORS, Heat Resisting

Alfa Amer. Corp.
American Lens
Amer. Optical
Bache & Co., Semon
Bausch & Lomb
Beseler Co.
Bronoptics Co.
Buhl Optical
Corning Glass Works
Esco Prods. Co.
Fish-Schurman
General Scientific
Gordon Enterprises
Haynes Stellite
Helio Instr. Co.
Internat. Devel. Co.
International Optical
Laboratory Optical
Lampkin Labs., Inc.
Lancaster Glass
Leroy Clausing Co.
Lynn, Robert M.
Merry Instr. Co.
Northrop Anaheim
Optron Laboratory
Palos Optical
Perkin-Elmer
Regal Instr. Co.
Simpson Optical
Zenith Optical Lab.

REFLECTORS, Special Alloy

Acme Industrial
Bausch & Lomb
Bronoptics Co.
Buhl Optical
E & W Optical
Gaertner Scientific
Georator Corp.
Gordon Enterprises
Haynes Stellite
Helio Instr. Co.
Internat. Devel. Co.
Kollmorgen Optical
Lab. Optical Co.
Merry Instr. Co.
Northrop Anaheim
Optron Lab.
Palos Optical
Penn Optical & Instr.
Perkin-Elmer
Regal Instr. Co.
Unertl Optical
Zenith Optical Lab.

REFRACTOMETERS

Amer. Instr. Co.
Amer. Optical
Applied Physics Corp.
Barnes Engrg. Co.
Bausch & Lomb
Bushnell Optical
Central Scientific
Consol. Electrodynamics
Davidson Mfg. Co.
Dearborn Scientific
Epic, Inc.
Ercona Corp.
Ever Ready Thermometer
Fish-Schurman
Fisher Scientific
Gaertner Scientific
Helio Instr. Co.
Industrial Gauges Corp.
Internat. Devel. Co.
Jarrell-Ash
Mfrs. Engrg. & Equip.
National Instr. Co.
Nichols, Lyman
Opplem Co., Inc.
Optical Service & Dev.
Phoenix Prec. Instr.
Photovolt Corp.
Polarizing Instr. Co.
Prec. Glass Prods. Co.
Precision Scientific
Process & Instruments
Zeiss, Inc., Carl

REFRACTORY TUBES and Materials (see also Thermowells)

Bristol Co.
Burrell Corp.
Carborundum Co.
Centralab Div.
Coors Porcelain Co.
Corning Glass Works
Du-Co Ceramics
Fish-Schurman
Internat. Devel. Co.
Laboratory Equip.
Minneapolis-Honeywell
Morganite, Inc.
Saxonburg Ceramics
Steatite Div.
Stupakoff Div.
Therm. Amer. Fsd. Quartz
Wheatstone Corp.

REFRIGERATION CONTROLLERS

A-P Control Corp.
AiResearch Mfg. Co.
Alco Valve Co.
Allen-Bradley Co.
Amer. Kloeckner-Moeller
Automatic Electric Mfg.
Autom. Timing & Controls
Bendix-Friez
Bristol Co.
Burling Instr. Co.
Cutler-Hammer
Dickson Co.
Electric Hotpack Co.
Electrimatic Corp.
Flow Controls, Inc.
Foxboro Co.
Frick Co.
Fulton Sylphon Div.
Genl. Controls Co.
GE Gen. Purp. Contr.
Hammel-Dahl
Haydon Mfg. Co.
Industrial Control Panel
Jo-Bell Products
Johnson Service Co.
Lumenite Electric
Magnetrol, Inc.
Marsh Corp., Jas. P.
Mason-Neilan Div.
McAlear Mfg. Co.
Mercoid Corp.
Minneapolis-Honeywell
Partlow Corp.
Penn Electric Switch
Phila. Thermometer Co.
Powers Reg. Co.
RKL Valve & Mfg.
Ranco, Inc.
Powers Reg. Co.
Sarco Co., Inc.
Schade Valve Mfg. Co.
Scientific Instr. Co.
Taylor Instr. Cos.
Thermometer Corp.
United Elect. Controls
Victory Engrg. Co.
Weston Instrs.
White-Rodgers

REGISTERS, Magnetic Shift, see Magnetic Shift Registers

REGULATORS, see Object of Measurement and Control, e. g. Flow Regulators, Temperature Regulators, etc.

REGULATORS, Air and or Gas, see Pressure Regulators, Air

REGULATORS, Boiler, see Boiler Room Instruments

REGULATORS, Current, see Current Regulators

REGULATORS, Damper, see Boiler Room Instruments

REGULATORS, District, see Gas Distribution

REGULATORS, Flow, see Flow Regulators

RELAY TESTERS

Automatic Electric
Berkeley Div.
Co-design Corp.
Davenport Mfg. Co.
Dit-Mco. Inc.
Dynapar Corp.
Eastern Specialty Co.
Electro-Physics
Fleetwood Labs. Inc.
Gates Electronic Co.
Green Rectifier Co.
Hoover Electronics
I-L-S Instr. Corp.
Kahn & Co.
Kurman Electric
Magnavox Co.
Multi-Amp Corp.
Nelson Electric Mfg.
Opad Electric
Potter & Brumfield
Radio City Prducts
Shallcross Mfg. Co.
Simpson Electric
Slaughter Co.
Standard Elect. Time
States Co.
Sun Electric
United Mfg. Co. Div.
Weston Instrs.

RELAYS, Control, including Automatic and Heavy Duty

Adams & Westlake
Aemco Inc.
Aero Switch Div.
Airpax Products
Allen-Bradley
Allied Control Co.
Amer. Instr. Co.
Amer. Kloeckner-Moeller
Anderson, A. & J. W.
Amperite Co., Inc.
Arrow-Hart & Hegeman
Assembly Products
Autocall Co.
Autom. Control Co.
Automation Controls
Automatic Electric
Automatic Elect. Mfg. Co.
Autom. Elect. Sales Corp.
Autom. Switch Co.
Autom. Timing & Controls
B/W Controller
Bailey Meter Co.
Barber-Colman
Beck Co.
Bendix, Eclipse-Pioneer
Betts & Betts
Branson Corp.
Clare & Co.
Clark Controller Co.
Cleveland Controls
Climax Div.
Comar Electric
Cook Electric
Control Corp.
Cramer Controls Corp.
Cutler-Hammer
Daven Co.
Daystrom Instrument
Deltronic Corp.
Denison Mfg. Co.
Devtronics, Inc.
Dormitzer Elec. & Mfg.
Eagle Signal Corp.
Eastern Industries
Ebert Electronics
Edison, Inc., Thomas A.
Edwards Co., Inc.
Electro-Mechanical Specs.
Electronic Spec. Co.
Electro-Tech Equip.
Elgin Natl. Watch
Energy Kontrols
Essex Wire Corp.
Esterline-Angus
Federal Telephone & Radio
Fisher-Pierce
G-V Controls
GE Gen. Purp. Contr.
General Automatic
General Controls Co.
GE, Apparatus Sales
Genisco, Inc.
Globe Electrical Mfg.
Guardian Elect. Mfg. Co.
H-B Instr. Co.
Haledy Electronic
Hart Mfg. Co.
Haydon Co., A. W.
Henschel Corp.
Hetherington & Son
Hi-G, Inc.
Hillburn Electronic Prods.
Industrial Engrg. Corp.
Industrial Timer Corp.
Internat. Business Machs.
Jaidinger Mfg. Co.
James Vibrapowr Co.
Johnson Co., E. F.
Kahn & Co.
Kellogg Switchboard
Kinetic Instr. Co.
Kurman Electric
Lake Erie Electronic
Larson Instr. Co.
Leach Relay Co.
Lectronic Research Labs.
Line Electric Co.
Lumenite Electronic
Luther Mfg. Co.
Mack Electric Devices
Magnecord Electric
Magnecraft Electric
Magnetic Amplifiers
Marion Electcl. Instr.
Mercoid Corp.
Minneapolis-Honeywell
Moore Products
National Time & Signal
North Electric
Ohmite Mfg. Co.
Palo Lab. Supply
Perfex Corp.
Phaostron Co.
Philadelphia Scientific
Philadelphia Thermometer
Phillips Contr. Corp.
Pollak Corp., Joseph
Potter & Brumfield
Precision Scientific
Prec. Thermom.
Price Electric
Relay Sales, Inc.
Relay Service Co.
Roller-Smith
Sargent & Co.
Sealectric Switch & Relay
Sigma Instruments
Signal Engrg. & Mfg.
Simpson Electric
Soreng Products
Square D Co.
Stromberg-Carlson
Struthers-Dunn
Syncro-Start Products
Triad Transformer
Triplett Electcl. Instr.
Union Switch & Signal
U. S. Instr. Corp.
U. S. Relay Co.
Victory Engrg. Co.
Walser Autom. Timer
Ward Leonard
Warrick Co.
Westinghouse Electric
Weston Electcl. Instr.
Wheelock Signals
White-Rodgers
Zenith Electric

RELAYS, Current, including Continuous

Adams & Westlake
Aemco Inc.
Airpax Products
Allen-Bradley
Allied Control Co.
Amer. Instr. Co.
Amer. Kloeckner-Moeller
Arrow-Hart & Hegeman
Assembly Products
Autocall Co.
Automatic Electric
Automation Controls
Autom. Elect. Sales Corp.
Autom. Switch Co.
Autom. Timing & Controls
Baso, Inc.
Bendix, Eclipse-Pioneer
Betts & Betts
Branson Corp.
Clare & Co.
Clark Controller Co.
Comar Electric
Cook Electric
Cutler-Hammer
Deltronic Corp.
Ebert Electronics
Edison, Inc., Thomas A.
Electra Mfg. Co.
Electro-Mechanical Specs.
Electronic Spec. Co.
Electro Tec Corp.
Electro-Tech Equip.
Elgin Natl. Watch
Essex Wire Corp.
Esterline-Angus
Filtors, Inc.
G-V Controls
GE, Apparatus Sales
General Automatic
General Controls Co.
Globe Electrical Mfg.
Guardian Electric
H-B Instrument
Hart Mfg. Co.
Hetherington Inc.
Hi-G, Inc.
Industrial Timer Corp.
Jaidinger Mfg. Co.
Kellogg Switchboard
Kurman Electric
Larson Instrument
Leach Relay Co.
Line Electric Co.
Magnecord Electric
Magnecraft Electric
Magnetic Amplifiers
Microloc Corp.
Ohmite Mfg. Co.
Paul & Stein
Perfex Corp.
Phaostron Co.
Phillips Control
Pollak Corp., Joseph
Potter & Brumfield
Price Electric
Roller-Smith
Relay Sales, Inc.
Relay Service Co.
Sealectric Switch & Relay
Signal Engrg. & Mfg.
Simpson Electric
Square D Co.
Stromberg-Carlson
Struthers-Dunn
Triad Transf. Corp.
Triplett Electcl. Instr.
Union Switch & Signal
U. S. Instr. Corp.
U. S. Relay Co.
Ward Leonard
Westinghouse Electric
Weston Instrs.
Wheelock Signals, Inc.

RELAYS, Demand Totalizing

Allied Control Co.
Autocall Co.
Autom. Switch Co.
Cook Electric
Electronic Spec. Co.
Elgin Natl. Watch Co.
Engrg. & Res. Corp.
Essex Wire Corp.
GE, Apparatus Sales
Guardian Electric
Hagan Chem. & Controls
Jaidinger Mfg. Co.
Leach Relay Co.
Magnecraft Electric
Sangamo Electric
Simpson Electric Co.
Triad Transf. Corp.
Westinghouse Electric

RELAYS, Electronic

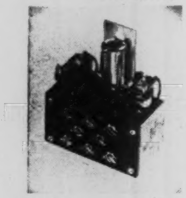
Aero Elx. (Chicago)
Allen-Bradley
Allied Control Co.
Amer. Electroneering
Amer. Instr. Co.
Amperite Co., Inc.
Authorized Mfrs. Service
Automatic Electric
Automatic Elect. Mfg.
Autom. Elect. Sales Corp.
Autom. Switch Co.
Autom. Timing & Controls
Automation Controls
Autron Engrg., Inc.
B/W Controller
Basic Controls, Inc.
Avion Div.
Beck Co.
Bell & Howell
Bendix, Eclipse-Pioneer
Berkshire Labs.
Bristol Co.
Burroughs Corp.
Central Scientific
Chicago Apparatus Co.
Clark Controller Co.
Coleman Electric
Comar Electric
Computer Co. of Amer.
Continental Elect. Co.
Cook Electric
Corbett Science Labs.

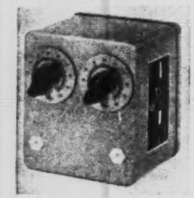
AUTOMATION COMPONENTS

PHOTOELECTRIC SCANNERS, MINIATURE

Small-size scanning heads for short-range, high-precision scanning of moving parts. Two types of photocells, three types of electronic relays.

TIMERS, ELECTRONIC



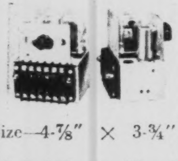


CK Timers use Type 5823 cold-cathode tube that provides instant starting with no tube warmup, immediate recycling, and long tube life. Eight-ampere contacts on all models.

Economy Models A, B, C, D, are furnished with choice of six time ranges,—full-scale range of 0.2, 0.5, 1.5, 3, 6, 12, or 24 seconds. Small size—4-⅜" × 3-⅞" × 2".

Model 3 Repeat-cycle Timer has independent adjustment of ON and OFF cycles, plug-in relays; is totally enclosed. Size 5" × 4-¼" × 3-¾".

Model 120 General Purpose Timer features plastic-enclosed plug-in relays, seven basic modes of operation, including repeat cycle timing. Size—4-⅞" × 3-¾" 3-½".



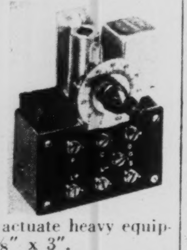
Model 2 Voltage-regulated Timer—Timed interval varies less than 2% of full scale for line voltage change between 95 and 125 volts.

SYNCHRONOUS CONTACTORS

Rotating camshaft actuates distributor-type switches to control punch presses, computors, and machine tools; provides protection for looms, punch and die tools. Single- and double-circuit models available. Descriptive bulletin on request.

RELAY, ELECTRONIC

Operated by high-speed low energy impulses

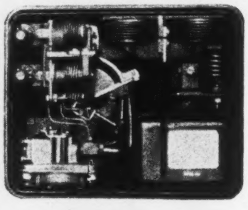


The Type CK electronic relay picks up impulses too small to operate a mechanical relay directly and holds the circuit closed long enough to actuate heavy equipment. Size: 3⅞" x 4⅞" x 3".

FARMER ELECTRIC
[illegible] Company, Incorporated
2300 WASHINGTON ST NEWTON LOWER FALLS, MASS

For more information circle **269** on inquiry card.

Cramer Controls Corp
Cutler-Hammer
Curtiss-Wright
Datascan, Inc
Davenport Mfg
Davis & Co., Inc., Dean
Datascan, Inc
Deltron, Inc.
Deltronic Corp.
Detect-O-Ray Co
De-Tec-Tronics Labs
Devtronics, Inc.
Dormitzer Elect. & Mfg
Ebert Electronics
Eby, Inc.
Edison, Inc., Thomas A.
Electro-Mechanical Labs
Electro-Mechanical Specs
Electro-Medical Lab.
Electronic Control Corp.
Electronic Devel. Lab.
Electronic Prods. Co
Electronic Spec. Co
Electronics Corp. of Amer
Electro-Physics Co
Elgin Natl. Watch
El Mec Labs.
El-Tronics, Inc.
Engineered Electronics
Engrg. & Res. Corp.
Engrg. Res. & Devel
Erdco Engrg. Co.
Ess Instr. Co.
Essex Wire Corp.
Excel Elect. Service Co
Farmer Elect. Prods
Farnsworth Electronics
Ferrara Inc.
Fisher-Pierce
Fisher Scientific
General Automatic
General Controls Co
GE, Apparatus Sales
Globe Electrical Mfg
Gorrell & Gorrell
Gould Labs.
Greiner, Emil
Guardian Elect. Mfg
H-B Instr. Co.
Haledy Electronic Co
Hart Mfg. Co.
Harvey Radio Labs.
Haydon Co., A. W.
Hi-G, Inc.
Hufco Industries
Indust. Electronic Conts
Industrial Electronics
Industro, Inc.
Instruments Inc.
Internat. Business Machs
Internat. Instr. Co
Jarco Services
Jarvis Electronics
Johanson Mfg. Co
Johnson Co., E. F.
Kahn & Co.
Kellogg Switchboard
Kinetic Instrument
Kurman Electric
L.A.B. Corp.
Labline, Inc
LaPine & Co
Larson Instrument
Leach Relay Co
Ling Electronics
Liquidometer Corp.
Lumenite Electronic
Lyman Electronic
Machinery Electrification
Mack Electric Devices
Magnecord Electric
Manning, Maxwell & Moore
Metron Instrument
Minneapolis-Honeywell
  Boston Div.
Mullenbach Elect. Mfg
Neomatic, Inc.
Newark Electric Co
North Electric
Opad Electric
Peschel Electronics
Phaostron Co.
Philadelphia Scientific
Phillips Control
Pioneer Magnetics
Phipps & Bird
Pollak Corp., Joseph
Post Machinery Co
Potter & Brumfield
Precision Scientific
Prec. Therm. & Insts
Price Electric
Process & Instruments
RCA Div.
Ransom Research
Raytheon Mfg
Relay Sales, Inc
Relay Service Co
Research Appliance Co
Revere Corp. of Amer.
Rockwell Engrg. Co.
Sargent & Co.
Servo-Tek Products
Sigma Instruments
Signal Engrg. & Mfg
Simpson Electric
Square D Co.
Standard Electrical Prods
Stelma, Inc.
Stromberg-Carlson
Struthers-Dunn
Sweets Co., Martin
Sylvania Elect. Prods
Technical Equipt. Co.
Televiso Products
Tempo Instr. Inc.
Thordarson-Meissner
Transistor Applications
Transistor Devices
Triad Transf. Corp.
Union Switch & Signal
U. S. Relay Co.
Universal Match
Vacuum Tube Prods
Varo Mfg.Co.
Virginia Electronics
Wabash Metal Prod
Walkirt Co.
Westinghouse Electric
Weston Instrs.
Wilkins-Anderson



BAILEY

COMPUTING RELAY

- Receives pneumatic signals from transmitters, controllers, and/or relays and produces a control signal according to the computing or control action desired.

As a computer it can multiply, divide, reverse, subtract, average, or totalize pneumatic signals.

As a controller it provides the following control actions: Proportional; Proportional plus Reset; Proportional plus Rate; Proportional plus Reset plus Rate; and Floating (Reset only).

Request Product Specification P99-3.

BAILEY METER COMPANY
1041 IVANHOE ROAD CLEVELAND, O.
Bailey Meter Company Ltd., Montreal, Canada

For more information circle **270** on inquiry card.

SQUARE D
ALLEN BRADLEY
PRICE ELECTRIC
KURMAN
CUTLER HAMMER
STEVENS ARNOLD
ALLIED
WESTON
GENERAL ELECTRIC
PHILLI
CONTR
CLARE
SIGMA
DORM
MATIC
WEST
ELEC
TRIC
AMP
EACH
POT
BRUN
HERS
NN
RTH
TRIC
LEDE
GUA
CTRIC
WARD
ANCE
CTRIC
STEPP
SWITC
ICALLY
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CONTAC
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KEYING
SOLENOIDS
MINIATURE
AIRCRAFT

LARGEST STOCK OF RELAYS IN THE WORLD

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Formerly Universal General Corp
42 WHITE ST., NEW YORK 13, N. Y. • WAlker 5-9642

For more information circle **271** on inquiry card.

Wilson & Co., G. C.
Worner Electronic Devices

RELAYS, Frequency

Autocall Co.
Automatic Switch Co.
Automation Controls
Bendix, Eclipse-Pioneer
Biddle Co., James G.
Clark Controller
Control Corp.
Cook Electric
Deltronic Corp.
Electronic Spec. Co
Elgin Natl. Watch
Engrg. & Res. Corp.
Esterline-Angus
G-V Controls
GE, Apparatus Sales
Globe Electrical Mfg
Guardian Electric
Gulton Industries
Hickok Electcl. Instr
Helipot Div.
Internat. Business Machs
James Vibrapowr Co.
Kellogg Switchboard
Leach Relay Co.
Lumenite Electronic
Phaostron Co.
Pioneer Magnetics
Potter & Brumfield
Sigma Instruments
Simpson Electric Co.
Stevens-Arnold, Inc.
Stromberg-Carlson
Tri-Tronics Co.
Triad Transf. Corp.
U. S. Relay Co.
Varo Mfg. Co., Inc.
Wallace & Tiernan
Ward Leonard
Waugh Engrg. Co
Westinghouse Electric

RELAYS, Galvanometer

Allied Control Co.
Assembly Products
Autocall Co.
Autom. Timing & Controls
Eby, Inc., Hugh H.
Edison, Inc., Thomas A.
Engrg. & Res. Corp.
Esterline-Angus
GE, Apparatus Sales
Larson Instr. Co.
Leach Relay Co.
Marion Electcl. Instr.
Minneapolis-Honeywell
  Boston Div
  Rubicon Instrs
Potter & Brumfield
Roller-Smith
Simpson Electric Co.
Triad Transf. Corp.
Varo Mfg. Co.

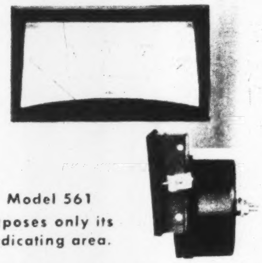
RELAYS, Heavy Duty (rating 30 amp. or above)

Adams & Westlake
Allen-Bradley
Amer. Kloeckner-Moeller
Autom. Switch Co.
B W Controller
Clark Controller
Cook Electric
Cutler-Hammer
Durakool, Inc.
Ebert Electronics
Electro-Tech Equip
Elgin Natl. Watch Co.
Energy Kontrols
Essex Wire Corp
Furnas Electric
GE, Apparatus Sales
General Controls Co
Gordos Corp.
Guardian Elect. Mfg Co
H-B Instr. Co.
Hetherington, Inc.
Jennings Radio Mfg. Corp
Johnson Co., E. F.
Kurman Electric
Leach Relay Co.
Lumenite Electronic
Mack Electric Devices
Magnecraft Electric
Phaostron Co.
Pollak Corp., Joseph
Potter & Brumfield
Price Electric
Relay Sales, Inc.
Simpson Electric Co
Stromberg-Carlson
Struthers-Dunn
U. S. Relay Co.
Ward Leonard
Westinghouse Electric
Wheelock Signals, Inc.
Zenith Electric

RELAYS, Hermetically Sealed

A'G'A Div
Ace Electronics Assoc. Inc.
Aemco, Inc.
AiResearch Mfg
American Monarch
Assembly Products
Automatic Electric Sales
Automation Controls
Baso Inc.
Belltron Mfg. Co.
Branson Corp.
Bristol Co.
Clare & Co., C. P.
Comar Elec.
Control Specialty
Cook Electric
Couch Ordnance, Inc.
Curtiss-Wright
Cutler-Hammer
Durakool, Inc.
Eagle-Signal
Ebert Electronics
Edison, Thomas A.
Electro-Mechanical Instr.

api PANEL METERS

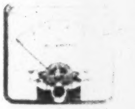


Model 561
Exposes only its indicating area.

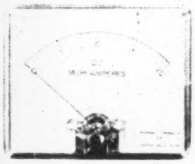
Model 561 panel meter has a big 5" x 2⅞" dial, yet takes 15% less panel space than usual 4½" rectangular meters. Behind-the-panel mounting hides entire case—meter projects only 3/16" from panel front.

Can be illuminated by back of panel light through window at top. Window and dial are slanted back for easy reading. No positioning holes needed—meter is snugged to panel by rear screw-on clamps.

Black satin finish is standard—no extra charge for gray in quantities. Other colors extra. Ranges: 0/5 microamperes to 0/50 amperes; 0/5 millivolts to 0/500 volts.



Model 261



Model 451

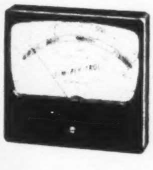
D'Arsonval movements, Alnico magnets, tubing or knife-edge pointers. AC meters are rectifier type. DC accuracy, 2%; AC 3%. Better accuracies available. Zero right, zero center meters or up to two-thirds of range suppressed. AC and DC meters in multiple ranges. Special dials in colors, black face, your name, etc. Mirror scales.

INDICATING PYROMETERS

TWENTY-ONE RANGES: −400° to +3000° F.

Accuracy 2% of Full Scale.

Model 461: 4½" black bakelite case, 0/750° F., with mirror scale.



Medium resistance (4 ohms per millivolt) thermocouple millivoltmeter. Compensated for cold junction and copper error.

Available with 1% accuracy. Can be thermistor compensated for ambient changes. Most styles supplied with mirror scales.

STYLES: PYROMETERS & API PANEL METERS

Ruggedized-Sealed: 2½, 3½, 4½-inch round metal case, sealed zero adjust, shock-mounted movement.

Black Bakelite: 2½", round or square, 3½" round or square, 4½" rectangular. (Other colors and illumination in 4½" size.)

Clear Plastic: 2½", 3¾" and 4½" rectangular.

api CONTROLS

SIMPLYTROL AUTOMATIC TEMPERATURE CONTROL, THERMOCOUPLE-ACTUATED

Model PR Proportioning Temperature Control

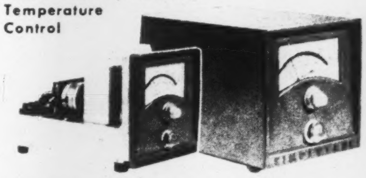


Table top converts to panelmount.

Ranges from −400° to +3000° F.

Simplytrol time proportioner holds temperature to ±1°. Anticipating circuit gives straight line control. Indicates continuously, reads directly. No vacuum tubes or amplifier. Load relay is SPDT 5 amps; optional ratings to 40 amps. Meter-relay is medium high resistance—has bimetal cold junction compensation.

No leveling required—just connect thermocouple, connect load, and plug in to 115 or 230 V. AC line. Size 6½" x 6½" x 10". Shallower models available.

Other Simplytrol controls with indicating accuracy of 2% available for limit and on-off control, or uses where extreme accuracy is not required.

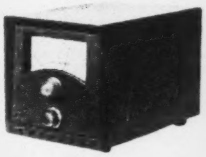
VERSATROL AUTOMATIC CONTROLS

For any variable that can be measured electrically. Adjustable control points. Automatic operation.

Cat. 3563

Versatrol High Limit Model 200 Case 0/1 Ma DC

Price **$114.00**



Versatrol consists of a meter-relay and all components for a complete control assembly. Any range or type of meter-relay can be supplied in a Versatrol.

They can be calibrated to read in any function that can be converted to electrical units. Load relays have 5 ampere contacts. Control point is adjustable from the front.

Control can be high limit (on an increase in signal), low limit (on a decrease in signal), or double (control action on rise or fall of signal).

Versatrol can be used for continuous on-off control or for shut-down or alarm. Available in wall cabinet, panel mount, "U-Mount-It" etc.

SPECIAL CONTROLS

Custom control work is our forte. We design and build controls for manufacture and inspection, overload control, and multi-point bearing temperature monitors. Tell us your problem.

Send For Catalog:

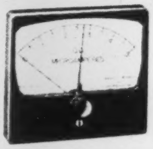
36-PAGE CATALOG 4-E DESCRIBES COMPLETE PRODUCT LINE—includes circuitry, response time, prices, discounts, etc.

api METER-RELAYS

Indicating meters with built-in locking contacts for control or alarm. Trip point adjustable.

Ranges: 0-5 Ua. to 0-50 A., 0-5 Mv. to 0-500 V. AC or DC. (Min. AC voltage range 0-250 Mv.) Thermocouple temp. ranges, −400 to +3000°F.

Model 255-C



Model 461-C Bakelite

Model 451-C

Life: 10 to 20 million operations.

Accuracy:

Point of contact: ¼% to 1%.

Indicating: ±2% of full scale at any point of dial. Can be 1%.

Contacts:

Rating: Standard is 5-25 milliamperes at 75-125 volts DC. Optional ratings to 250 Ma, 6 to 250 volts., DC.

Arrangement: High Limit (makes on increase of signal), Low Limit (makes on decrease of signal), Double (both high and low contacts.)

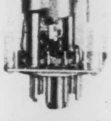
Case Styles

Ruggedized-sealed metal cases are 2½, 3½, and 4½" round, shock-mounted movement, gasket-sealed. Black Bakelite . . . glass front, 4½" rectangular case. Other colors on special order. Clear Plastic 2½, 3¾, and 4½" rectangular.

MIL Specs:

Ruggedized-sealed meter-relays will meet these specs: Shock: 1 and 3-foot drops, 400 lb. hammer, 3 planes. Vibration: MIL-M-10304A.

Salt Spray: QQ-M-151A Temp.: −30°/+70°C. Sealing: MIL-M-6A.



VHS METER-RELAY

(Very High Sensitivity)

Plastic Case, or Solder-Sealed Metal Case. 1⅜ x 2" approx.

Connections: 9-pin octal style, or miniature, or solder.

Weight: 4 ounces.

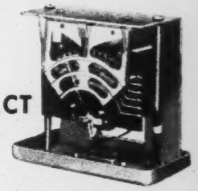
Sensitivity: From 0.2 Ua to 10 Amp., 0.1 Mv to 500 volts. AC relays are rectifier type.

Accuracy: Trip point to 2% (depends on sensitivity). Differential and repeatability 1%.

Shock & Vibration: Operates at 10 G or more, 5-55 cycles. Non-operating, withstands 10 G or more, 5 to 2,000 cycles; shocks of 10 G or more.

Contacts: SPST or SPDT, 5-25 Ma DC. Other ratings to ½ Amp. AC.

LIAD MULTI-CONTACT METER-RELAY



The LIAD consists of a D'Arsonval meter movement with one or several contacts carried on the moving pointer, a printed circuit scale (95 angular degrees), and a device for gripping the pointer and its contacts to the scale contact bars.

The unique combination of contact closures resulting from this gripping tells the level of the signal—and can be transmitted or used for telemetering; automatic production testing or grading; maximum value reading; simple quantitative read-out, etc.

api Assembly Products Inc. Chesterland 30, Ohio

For more information circle **272** on inquiry card.

Special and Standard

POLLAK CONTROLS

Accurate, Dependable, Long Life

Nearly a half century of experience in specialized design and production of precision components . . .

RELAYS

COAXIAL
COMMUNICATIONS
COMPUTER, POWER CIRCUIT
HIGH VOLTAGE
MINIATURE
MINIATURE HERMETICALLY SEALED
PULSE

SOLENOIDS

MINIATURE
PLUNGERS FOR PUSH OR PULL
300 CUSTOM TYPES FROM 20 STANDARD PARTS
DOUBLE ACTING

SWITCHES

IMPULSE
MOMENTARY
PUSH PULL
ROTARY SELECTOR
TOGGLE

OUR ENGINEERS CAN HELP SOLVE YOUR PROBLEMS

Take advantage of POLLAK engineering design service. Our factory-trained engineers are available to help you solve difficult relay, switching and electrical control problems.

WE INVITE YOUR INQUIRY

JOSEPH POLLAK CORPORATION

DEPT. C
75-95 Freeport Street
Boston 22, Mass.

For more information circle 273 on inquiry card.

Electro Mechanical Spec.
Electro Tec Corp.
Electro Tech Equip.
Elgin Nat'l Watch Co
Energy Kontrols, Inc
Essex Wire Corp.
Filtors, Inc
GE Apparatus Sales
GE, Specialty Controls
G-V Controls
General Automatic Corp
Genl. Hermetic Sealing
Globe Electrical Mfg
Guardian Electric Mfg
H-B Instrs
Haledy Electronics
Hamlin Inc
Hart Mfg. Co
Haydon Co., A. W
Hi-G, Inc
Hillburn Electronic Prods
Intelex Systems
Iron Fireman Mfg.
Jarco Services, Inc.
Kurman Electric Co
LR Electronics
Leach Relay Div
Leland Inc. G. H
Magnecraft Electric
Magnetic Amplifiers
Marion Electrical Inst
Mercoid Corp
Molex Products
Naybor Labs
North Electric
Ohmite Mfg. Co
OK Electronics Corp
Phaostron Instr. & Elect.
Pollak Corp. Joseph
Potter & Brumfield
Price Electric
Radio Corp. of Amer
Radionics, Inc.
Revere Corp. of Amer
Sealectric Switch & Relay
Sigma Instruments
Simpson Electric Co
Stevens-Arnold, Inc.
Struthers-Dunn Co.
Tung-Sol Electric
Union Switch & Signal
U. S. Relay Co.
Weston Instrs.
Wheelock Signals

RELAYS, Instrument Controlled

Abrams Instr. Co.
Adams & Westlake
Aemco Inc.
AiResearch Mfg. Co
Allied Control Co.
Amer. Instr. Co.
Amer. Kloeckner-Moeller
Amperite Co., Inc.
Assembly Products
Autocall Co.
Automatic Elect. Mfg.
Autom. Elect. Sales Corp.
Autom. Switch Co.
Autom. Timing & Controls
Automation Controls
Bailey Meter Co.
Barber-Colman
Basic Controls, Inc.
Baso, Inc.
Beck Co.
Bendix, Eclipse-Pioneer
Bendix-Friez
Bristol Co.
Branson Corp.
Clark Controller
Climax Div.
Comar Electric
Conoflow Corp.
Cook Electric
Cramer Controls Corp.
Datascan, Inc.
Deltronic Corp.
Devtronics Inc.
Ebert Electronics
Edison Inc., Thomas A.
Electric Des. & Mfg.
Electro-Mech. Instr.
Electronic Specialty Co.
Electro-Tech Equip.
Elgin Natl. Watch
Essex Wire Corp.
General Controls Co.
GE, Apparatus Sales
Guardian Elect. Mfg. Co.
H-B Instr. Co
Haledy Electronic Co.
Haydon Co., A. W.
Henschel Corp.
Instruments Inc
Jaidinger Mfg. Co.
Larson Instr. Co.
Leach Relay Co.
Luther Mfg. Co.
Mack Electric Devices
Magnecord Electric
Magnecraft Electric
Manning, Maxwell & Moore
Marion Electcl. Instr.
Minneapolis-Honeywell
Moore Products
Perfex Corp.
Phaostron Co.
Philadelphia Scientific
Philadelphia Thermom. Co
Phillips Controls
Pollak Corp., Joseph
Potter & Brumfield
Precision Scientific
Prec. Therm. & Insts.
Ransom Research
Relay Service Co.
Roller-Smith
Scam Instr. Corp.
Sealectric Switch & Relay
Sigma Instruments
Signal Engrg. & Mfg.
Simpson Electric
Stromberg-Carlson
Struthers-Dunn
Taylor Instr. Cos.
Technical Equipt. Corp
Tork Clock
Triad Transf. Corp.
Triplett Electcl. Instr.
Union Switch Signal
U. S. Relay Co.
Ward Leonard
Westinghouse Electric
Weston Instrs

RELAYS, Latching, see Relays, Stepping

RELAYS, Light Sensitive, see Relays, Photoelectric

RELAYS, Magnetic, see Relays, Electromagnetic

RELAYS, Mercury (see also Switches, Mercury)

Adams & Westlake
Allied Control Co.
Amer. Instr. Co.
Autocall Co.
Autom. Elect. Sales Corp
Autom. Timing & Controls
Chatham Electronics
Clare & Co., C. P.
Continental Elect. Co
Deltron, Inc.
Durakool, Inc.
Ebert Electronics
Electro Devices (St. Louis)
Electronic Apparatus
Energy Kontrols
Gordos Corp.
H-B Instr. Co.
Haledy Electronics
Hamlin, Inc
Mack Electric Devices
Mercoid Corp.
Mercury Contacts, Inc.
Minneapolis-Honeywell
Philadelphia Scientific
Precision Scientific
Prec. Thermom. & Insts.
Relay Sales, Inc
Scientific Glass App.
Struthers-Dunn
Wabash Metal Prod.

RELAYS, Mercury Tube

Adams & Westlake
Allied Control Co.
Amer. Instr. Co.
Autocall Co.
Autom. Elect. Sales Corp.
Autom. Timing & Controls
Chatham Electronics
Clare & Co., C. P.
Durakool, Inc.
Ebert Electronics
Electric Switch Corp.
Electro-Tech Equip.
G-M Labs.
General Controls Co.
Gordos Corp.
Greiner, Emil
H-B Instr. Co
Haledy Electronics
Kellogg Switchboard
Mack Electric Devices
Mercoid Corp.
Mercury Contacts, Inc.
Minneapolis-Honeywell
Philadelphia Scientific
Philadelphia Thermom. Co.
Precision Scientific
Prec. Thermom. & Insts.
Relay Sales, Inc.
Struthers-Dunn
Wabash Metal Prod.
Ward Leonard

RELAYS, Motor Driven, Time Delay

Abrams Instr. Corp.
Advanced Products Co.
AGA Div.
Aemco, Inc.
Allen-Bradley
Amer. Instr. Co.
Amperite Co., Inc.
Automatic Elect. Mfg.
Autom. Switch Co
Autom. Timing & Controls
Barber-Colman
Bendix-Friez
Betts & Betts
Bristol Motor Div.
Clarostat Mfg. Co.
Control Engrg. Co.
Controls, Inc.
Cook Electric
Cramer Controls Corp.
Cutler-Hammer
Dimco-Gray
Eagle Signal Corp.
Electronic Spec. Co.
Electro-Tech Equip.
Elgin Natl. Watch
Energy Kontrols
General Controls Co.
GE Apparatus Sales
GE Gen. Purp. Contr.
Globe Industries
Guardian Elect. Mfg. Co.
Hagen Mfg. Co.
Haydon Co., A. W.
Haydon Mfg. Co.
Henschel Corp.
Industrial Engrg. Corp.
Industrial Timer Corp.
Kopp Scientific
Kurman Electric
Leach Relay Co.
Lumenite Electronics
Minneapolis-Honeywell
Paragon Electric
Philadelphia Scientific
Potter & Brumfield
Price Electric
Relay Sales, Inc.
Sealectric Switch & Relay
Square D Co.
Struthers-Dunn
Vocaline Co. of Amer.
Wallace & Tiernan
Ward Leonard
Westinghouse Electric
Weston Instrs
Zenith Electric

RELAYS, Movable Coil, A C

Allen-Bradley
Amer. Kloeckner-Moeller
Assembly Products
Automatic Elect. Mfg.
Autom. Switch Co.
Clark Controller
Cook Electric
Cutler-Hammer
Electro-Tech. Equipt.
Elgin Nat'l Watch Co.
Esterline-Angus
Kurman Electric
GE, Apparatus Sales
Guardian Elect. Mfg. Co.
Larson Instr. Co.
Potter & Brumfield
Relay Sales, Inc
Roller-Smith Co.
Simpson Electric
Struthers-Dunn
Tipp-Tronic, Inc
Triplett Electcl. Instr.
Union Switch
Westinghouse Electric
Weston Instrs

RELAYS, Overload

Adams & Westlake
Allen-Bradley
Allied Control Co.
Amer. Kloeckner-Moeller
Amperite Co., Inc.
Assembly Products
Autocall Co.
Automatic Elect. Mfg.
Autom. Switch Co.
Autom. Timing & Controls
Automation Controls
B W Controller
Baso, Inc
Bunnell & Co.
Burlington Instr. Corp.
Clark Controller Co.
Comar Electric
Cook Electric
Cutler-Hammer
E-T-A Products
Edison, Inc., Thomas A.
Edison, Instr. Div.
Electro-Mechanical Specs.
Electronic Control Corp.
Electronic Specialty Co.
Elgin Natl. Watch
Energy Kontrols
Essex Wire Corp.
Filtors, Inc.
Furnas Electric
G-V Controls, Inc.
GE, Apparatus Sales
GE Gen. Pump. Contr.
Guardian Elect. Mfg. Co.
Jaidinger Mfg. Co.
Jennings Radio Mfg. Corp.
Kurman Electric
Larson Instr. Co.
Leach Relay Co.
Magnecord Electric
Magnecraft Electric
Monitor Controller Co.
Neomatic, Inc.
North Electric
Ohmite Mfg. Co.
Perfex Corp.
Phaostron Co.
Pollak Corp.
Potter & Brumfield
Price Electric
Relay Sales, Inc
Roller-Smith
Sealectric Switch Relay
Sigma Instruments
Simpson Electric
Square D Co
Standard Electcl. Prods.
Struther-Dunn
Sweets Co., Martin
Tung-Sol Electric
U. S. Relay Co.
Ward Leonard
Westinghouse Electric
Weston Instrs

RELAYS, Permanent-Magnet Movable Coil (D'Arsonval Type)

Amer. Kloeckner-Moeller
Assembly Products
Automatic Switch
Bunnell & Co., J. H.
Cook Electric
Electric Des. & Mfg.
Essex Wire Corp
Esterline-Angus
GE, Apparatus Sales
Kurman Electric
Larson Instr. Co.
Leach Relay Co.
Marion Electcl. Instr.
Relay Sales, Inc
Roller-Smith
Rudolph & Sons, O. C.
Simpson Electric
Signal Engrg. & Mfg.
Tipp Tronic, Inc
Triplett Electcl. Instr. Co.
Westinghouse Electric
Weston Instrs

RELAYS, Photoelectric

Allied Control Co.
Amer. Instr. Co.
Automatic Electric
Autom. Elect. Sales Corp.
Autom. Timing & Controls
Autotron Co.
Autron Engrg., Inc.
Avion Div.
Basic Controls, Inc
Comar Electric
Continental Electric
Cutler-Hammer
Datascan, Inc.
Davenport Mfg.
Deltron, Inc.
Detect-O-Ray
De-Tec-Tronic Corp
Dickson Co.
Eby, Inc.
Edison, Thomas A.
Electro-Mechanical Insts.
Electro-Physics Co
Electronic Control Corp.
Electronic Dev. Lab
Electronic Prods. Co
Electronics Corp. of Amer
Electro-Tech Equip.
Elgin Natl. Watch
El-Tronics, Inc.
Engrg. Res. & Devel.
Ess Instr. Co.
Farmer Electr. Prods. Co
Fisher-Pierce
G-M Labs., Inc
General Controls Co.
GE, Apparatus Sales
Gorrell & Gorrell
Guardian Elect. Mfg. Co
Haledy Electronics
Hetherington, Inc.
Hunter Mfg. Co.
Hupp Electronics
Indust. Electronic Conts.
Jordan Co
Kurman Electric
Larson Instr. Co.
Leach Relay Co.
Lewyt Corp.
Lumenite Electronics
Machinery Electrification
Minneapolis-Honeywell
  Rubicon Instrs.
Neomatic, Inc.
Phaostron Co.
Phillips Control
Phipps & Bird
Phoenix Prec. Instr.
Potter & Brumfield
Potter Instr. Co.
Prec. Thermom.
Relay Service Co
Ripley Co.
Rockwell Engrg. Co
Sigma Instruments
Simpson Electric Co
Struthers-Dunn
Triplett Electcl. Instr.
Tri-Tronics Co
Victory Engrg. Co
Ward Leonard
Westinghouse Electric
Weston Instrs.
Worner Electronic Devices

RELAYS, Pneumatic

A G A Div.
AiResearch Mfg. Co
Allen-Bradley
Bailey Meter Co.
Bellofram Corp.
Black, Sivalls & Bryson
Bristol Co.
Clark Controller
Conoflow Corp.
Cutler-Hammer
Dahl Co., Inc., George W.
Eagle Signal Corp.
Fisher Governor
Foxboro Co.
GE Gen. Purp. Contr.
Hagan Chem. & Controls
Johnson Service Co.
Kendall Controls Corp.
Mead Specialties Co.
Minneapolis-Honeywell
Moore Products
Phaostron Co.
Powers Reg. Co.
Research Controls
Taylor Instr. Cos.
Westinghouse Air Brake

RELAYS, Polarized

Airpax Prod.
Allied Control Co.
Assembly Products
Autocall Co.
Automatic Electric
Automatic Elect. Mfg.
Autom. Elect. Sales Corp.
Autom. Switch Co.
Babcock Relays
Barber-Colman
Bendix, Eclipse-Pioneer
Branson Corp.
Bristol Co.
Bunnell & Co
Clare & Co., C. P.
Clark Controller Co.
Cook Electric
Edison Inc., Thomas A.
Electro-Mechanical Inst.
Elgin Natl. Watch
Filtors, Inc
GE, Apparatus Sales
Hart Mfg. Co.
Hetherington, Inc.
Jaidinger Mfg. Co.
Kurman Electric
L.A.B. Corp.
Larson Instr. Co.
Leach Relay Co.
Luther Mfg. Co.
Magnecord Electric
Marion Electcl. Instr.
Matisa Equipt. Corp.
Maxson Corp.
Neomatic, Inc.
North Electric
Phaostron Co.
Pollak Corp., Joseph
Potter & Brumfield
Prec. Thermom. & Insts.
Raytheon Mfg.
Relay Sales, Inc.
Sealectric Switch & Relay
Sigma Instruments
Signal Engrg. & Mfg.
Stevens-Arnold, Inc.
Stromberg-Carlson
Struthers-Dunn
Triplett Electcl. Instr.
Union Switch & Signal
U. S. Instr. Corp.
Westinghouse Electric

Weston Instr
Wheelock Signals

RELAYS, Power

Adams & Westlake
Aemco Inc
Allen-Bradley
Allied Control Co
Amer. Instr. Co
Amer. Kloeckner Moeller
Automatic Electric
Automatic Elect. Mfg
Autom. Switch Co
Automation Controls
Bendix, Eclipse Pioneer
Branson Corp
Clare & Co., C. P.
Clark Controller Co
Comar Electric
Cook Electric
Couch Ordnance
Cutler-Hammer
Detect-O-Ray
Ebert Electronics
Electro-Mechanical Specs
Electronic Spec. Co
Elgin Natl. Watch
Energy Kontrols
Essex Wire Corp
Esterline-Angus
Filtors, Inc
General Controls Co
GE, Apparatus Sales
GE Gen. Purp. Contr
Globe Electrical Mfg
Graybill
Guardian Elect. Mfg. Co
H-B Instr. Co
Hagan Chem. & Control
Hart Mfg. Co
Henschel Corp
Hetherington, Inc
Hi-G, Inc
Hillborn Electronic Prods
Hufco Industries
Jennings Radio
Johnson Co., E. F.
Kurman Electric
Leach Relay Co.
Mack Electric Devices
Magnecraft Electric
North Electric
Ohmite Mfg. Co
Perfex Corp
Phaostron Co.
Philadelphia Scientific
Phillips Control
Pollak Corp., Joseph
Potter & Brumfield
Price Electric
Relay Sales, Inc
Roller Smith
Sealectric Switch & Relay
Sigma Instruments
Signal Engrg. & Mfg
Square D Co
Struthers-Dunn
Swartwout Co.
U. S. Instr. Corp
U. S. Relay Co.
Ward Leonard
Warrick Co., Charles F
Westinghouse Electric
Weston Instr
Wheelock Signals

RELAYS, Sensitive

Adams & Westlake
Aemco Inc
Amer. Instr. Co.
Assembly Products
Automatic Electric
Autom. Elect. Sales Corp
Autom. Switch Co.
Automation Controls
Babcock Relays
Baso, Inc
Biddle Co., James G
Bristol Co.
Clare & Co., C. P.
Comar Electric
Cook Electric
Couch Ordnance
Ebert Electronics
Edison, Inc., Thomas A.
Electro-Mech. Instr
Electro-Mechanical Spec.
Electronic Specialty Co.
Electronics Corp. of Amer
Electrosonic Engrg. Co.
Electro-Tech Equip.
Elgin Natl. Watch
Essex Wire Corp
Fed Telephone & Radio
General Automatic
General Controls Co.
GE, Apparatus Sales
Globe Electrical Mfg
Guaradian Elect. Mfg. Co
H-B Instr. Co.
Hart Mfg. Co.
Haydon Co., A. W
Hetherington Inc.
Hillburn Electronic Prods
Iron Fireman Electronics
James Vibrapowr Co
Kurman Electric
Larson Instr. Co
Leach Relay Co.
Liquidometer Corp
Lumenite Electronic
Luther Mfg. Co.
Mack Electric Device
Magnecraft Electric
Marion Electrical Inst
Mullenbach Div.
Mutual Industries
Neomatic, Inc
North Electric
Ohmite Mfg. Co
Phaostron Co.
Phillips Control Corp
Pioneer Magnetics
Potter & Brumfield
Price Electric
Process & Instruments
Ransom Research
Relay Sales, Inc
Relay Service Co.
Research Appliance Co.
Revere Corp. of Amer.
Sealectric Switch & Relay
Sigma Instruments
Simpson Electric
Std. Electrical Prods
Struthers-Dunn
Torwico Electronics
Tung-Sol Electric
Union Switch & Signal
U. S. Instr. Corp.
U. S. Relay Co
Victory Engrg. Co
Ward Leonard
Westinghouse Electric
Weston Instr
Wheelock Signals
Winslow Co., Inc.

RELAYS, Stepping

Allied Control Co.
Autocall Co.
Automatic Electric
Automatic Elect. Mfg
Autom. Elect. Sales Co
Clare & Co., C. P.
Clark Controller
Collins Radio Co
Control Engrg. Co.
Cook Electric
Corbett Science Labs
Daystrom Inst.
Electronic Spec. Co
Electro-Tech Equip
Elgin Nat'l. Watch Co.
Engineered Electronics
Federal Telephone & Radio
GE, Apparatus Sales
Guardian Elec. Mfg. Co.
Haydon Co., A. W
Hetherington, Inc
Hillborn Electronic Prod
Intra Corp.
Intelex Systems
Kellogg Switchboard
Leach Relay Co.
Leland, Inc., G. H
Lumenite Electronics
Neomatic, Inc
North Electric
Oak Mfg. Co.
Phaostron Co
Phillips Control Corp
Potter & Brumfield
Price Electric
Relay Sales, Inc
Roller Smith
Sealectric Switch & Relay
Square D Co.
Std. Electrical Prods.
Struthers-Dunn
Union Switch & Signal
U. S. Instr. Corp.
Westinghouse Electric

RELAYS, Subminiature

Aemco Inc
AiResearch Mfg. Co
American Monarch
Amperite Co., Inc.
Auto Electric Sales
Automation Controls
Babcock Relays
Baso, Inc
Belltron Mfg
Branson Corp.
Bristol Co.
Clare & Co., C. P.
Comar Elec
Cook Electric
Couch Ordnance
Deltronic Corp.
Electro-Mech. Instr
Electro-Mechanical Specs.
Electronic Spec. Co.
Electrosonic Engrg. Co.
Elgin Natl. Watch
Fed. Telephone & Radio
Filters, Inc.
General Automatic
GE, Apparatus Sales
GE, Specialty Contrls
Guaradian Elect. Mfg
Hart Mfg. Co
Hetherington Inc.
Hi-G, Inc
Hilburn Electronic Prods
Hufco Industries
Intelex Systems
Iron Fireman Mfg
Jennings Radio Mfg
Kurman Electric
Leach Relay Co.
Luther Mfg. Co.
Magnecraft Electric
Molex Products
Mutual Industries
Naybor Laboratories
Neomatic, Inc.
North Electric Mfg.
Phaostron Co.
Phillips Control Corp
Pollak Corp., Joseph
Potter & Brumfield
Price Electric
Radio Corp. of Amer
Relay Sales, Inc
Relay Service Co.
Revere Corp. of Amer.
Sealectric Switch & Relay
Sigma Instruments
Std. Electrical Prods.
Struthers-Dunn
Telex, Inc
Union Switch & Signal
U. S. Relay Co.
Victory Engrg. Co
Wheelock Signals
Winslow Co., Inc.

RELAYS, Telephone, Auxiliary Ringing

Allied Control Co.
Amer. Relay
Autocall Co.
Automatic Electric
Automation Controls
Autom. Elect. Sales Corp.
Clare & Co., C. P.
Comar Electric
Cook Electric
Electronic Spec. Co
Elgin Natl. Watch
Essex Wire Corp.
Federal Telephone & Radio
General Automatic
Globe Electrical Mfg
Guardian Elect. Mfg.
Henschel Corp.
Hillborn Electronic Prods.
Hufco Industries
Intra Corp
Kellogg Switchboard
Kurman Electric
Leach Relay Co.
Magnecord Electric
Magnecraft Electric
Mutual Industries
North Electric Mfg
Ohmite Mfg. Co.
Phaostron Instr. & Elec
Phillips Control
Potter & Brumfield
Price Electric
Relay Sales, Inc
Sealectric Switch & Relay
Sigma Instruments
Signal Engrg. & Mfg.
Std. Electrical Prods.
Stromberg-Carlson
Struthers-Dunn
U. S. Instr. Corp.
U. S. Relay Co.
Weston Instr
Wheelock Signals

RELAYS, Temperature

Allen-Bradley
Assembly Products
Autocall Co.
Autom. Timing & Controls
Autron Engrg., Inc
Bar-Ray Products
Baso, Inc
Bendix-Friez
Bristol Co.
Cardinal Instrumentation
Cook Electric
Cutler-Hammer
Electronic Control Corp
E-T-A Products Co
Electronic Spec. Co.
Elgin Natl. Watch
Engers Kontrols, Inc
Fielden Instr. Div.
G-M Laboratories
G-V Controls
General Automatic Corp
General Controls
GE, Apparatus Sales
Gleason-Avery
Globe Electrical Mfg
Guardian Elect. Mfg
H-B Instr. Co
Jaidinger Mfg. Co
Kurman Electc. Div
Kybernetes Corp.
Larson Instr. Co.
Leach Relay Co.
Lewis Engrg. Co
Magnetic Research Corp
Minneapolis-Honeywell
Molex Products
North Electric
OK Electronics Corp
Perfex Div.
Pioneer Magnetics
Potter & Brumfield
Powers Reg. Co
Process & Instruments
Square D Co.
Squires Co., C. E.
Sorenq Products
Struthers-Dunn, Inc
Triplett Electcl. Instr.
Ulanet Co
U. S. Relay Co
Victory Engrg. Co
Westinghouse Electric

RELAYS, Temperature-compensated

Airpax Products
Assembly Products
Automation Controls
Autom. Elect. Sales Corp
Betts & Betts
Branson Corp.
Bristol Co.
E-T-A Products
Edison, Inc., Thomas
Electra Mfg. Co
Electronic Spec. Co.
Elgin Natl. Watch
Fielden Instr. Div
G-V Controls, Inc.
GE, Apparatus Sales
Hart Mfg. Co
Hetherington Inc.
Jaidinger Mfg. Co
Larson Instr. Co.
Leach Relay Co.
Milwaukee Gas
Minneapolis-Honeywell
Neomatic, Inc.
Phaostron Co.
Pollak Corp., Joseph
Sigma Instruments
Struthers-Dunn
U. S. Relay Co
Wallace & Tiernan
Westinghouse Electric

RELAYS, Time Delay

A'G'A Div.
Abrams Instr. Corp.
Adams & Westlake
Advance Elect. & Relay Co.
Aemco Inc.
Allegany Instr. Co.
Allen-Bradley
Amer. Gas Accumulator
Amer. Instr. Co.
Amperite Co.
Autocall Co.
Autom. Electric Co.
Autom. Elect. Mfg. Co.
Autom. Elect. Sales Corp.
Autom. Switch Co.
Autom. Timing & Controls
Automation Controls
Barber-Colman
Basic Controls, Inc.
Baso, Inc
Belltron Mfg
Betts & Betts
Borel & Co.
Branson Corp
Bristol Co.
Clare & Co.
Clark Controller Co
Clarostat Mfg. Co
Comar Electric
Control Engrg. Co
Cook Electric
Cramer Controls Corp
Curtiss-Wright
Cutler-Hammer
Dormitzer Elect. & Mfg
Durakool, Inc.
E-T-A Products
Eagle Signal
Ebert Electronics
Edison Inc., Thomas A
Elastic Stop Nut
Electro-Mech. Specialties
Electronic Prods. Co
Electronic Spec. Co.
Electronics Corp. of Amer
Elgin Natl. Watch
Energy Kontrols
Ferrara, Inc.
Fisher-Pierce
G-V Controls, Inc.
General Controls Co.
GE, Apparatus Sales
GE Gen. Purp. Contr
Globe Electrical Mfg
Globe Industries
Gordos Corp.
Guardian Elect. Mfg. Co
Hagan Chem. & Controls
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Hamlin, Inc
Haydon Co., A. W.
Haydon Mfg. Co.
Heinmann Elect. Co
Hetherington, Inc.
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Industrial Timer Corp
Internat. Business Machs
Jaidinger Mfg. Co.
Jarvis Electronics
Kellogg Switchboard
Kurman Electric
Larson Instrument
Leach Relay Co.
Lumenite Electronics
Magnecraft Electric
Meletron Corp.
Metals & Controls Corp
Minneapolis-Honeywell
Mutual Industries
National Time & Signal
Naybor Laboratories
Nelson Electric Mfg
Neomatic, Inc.
North Electric
Ohmite Mfg. Co.
Paragon Electric
Partlow Corp.
Perfex Corp
Phaostron Co
Phillips Control Corp.
Photoswitch Div.
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Pollak Corp., Joseph
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U. S. Relay Co
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Vocaline Co. of Amer
Waugh Engineering
Ward Leonard
Westinghouse Electric
Weston Instr.
Wilson & Co., G. C.
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Zenith Electric Co.

RELAYS, Transformer, Low Voltage

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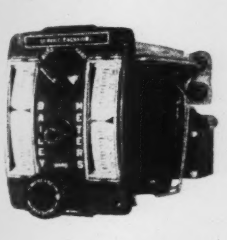
Allied Control Co.
Auth Elect. Specialties
Autom. Electric Co.
Autom. Switch Co.
Automation Controls
B.W. Controller Corp.
Barber-Colman
Bendix-Friez
Comar Electric
Control Engrg. Co
Cook Electric
Electro-Mech. Specialties
Electronic Spec. Co
Elgin Natl. Watch
General Controls Co.
GE, Apparatus Sales
Gleason-Avery
H-B Instrument
Industrial Engrg. Corp
Kurman Electric
Larson Instrument
Leach Relay Co.
Lumenite Electronics
Magnecord Electric
Mercoid Corp.
Minneapolis-Honeywell
Partlow Corp.
Perfex Corp.
Raytheon Mfg. Co.
Relay Sales, Inc.
Sealectric Switch & Relay



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Bailey Meter Company Ltd., Montreal Canada

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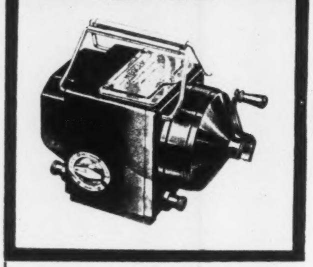

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RELAYS, Vacuum Contact

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Ebert Electronics
Edison, Inc., Thomas A
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Elgin Natl. Watch
Energy Kontrols
Essex Wire Corp.
GE
H-B Instr. Co.
Hastings-Raydist
Jennings Radio Mfg. Corp.
Lumenite Electronics
Mack Electric Devices
Pollak Corp., Joseph
Rockwell Engrg. Co.
Struthers-Dunn

RELAYS, Vacuum Tube, see Relays, Electronic

RELAYS, Vibrating Reed Type

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Bristol Co.
Cutler-Hammer
Electra Mfg. Co.
GE Apparatus Sales
Globe Electrical Mfg.
Hetherington, Inc.
James Vibrapowr Co.
Mutual Elect. Industries
Neomatic, Inc.
North Electric
Potter & Brumfield
Revere Corp. of Amer.
Stevens-Arnold
U. S. Instr. Corp.
Winslow Co.

RELIEF VALVES, see Valves, Relief

REMOTE-CONTROL EQUIPMENT, see Telemetering

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Autom. Switch Co.
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Bendix-Pacific
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Cutler-Hammer
Femco, Inc.
GE, Apparatus Sales
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Genzlinger, Inc.
Globe Industries
Industrial Elect. Engrg.
Instruments, Inc.
Jamesbury Corp.
NRD Instr. Co.
North Electric
Nuclear Corp. of Amer.
Panellit, Inc.
R.K.L. Valve & Mfg. Co
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Taller & Cooper
Universal Atomics Corp.
Wallson Associates
Warner & Swasey Res.

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REMOTE-METERING EQUIPMENT, Pneumatic, see Pressure Differential Transmitters

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Central Scientific
Clarke Instr. Corp.
Clarostat Mfg. Co.
Central Scientific
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Cinema Engrg. Co.
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Electronic Associates
Electronic Devel. Lab.
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International Resistance
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Kearfott (Western)
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  Rubicon Instrs.
Muirhead Instrument
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Triumph Mfg. Co.
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Clippard Instr. Lab.
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Electronic Instr. Co.
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Federal Telephone & Radio
Feiler Engrg. Co.
Freed Transf. Co.
General Radio
Industrial Instrs., Inc.
Indust. Test Equipt. Co
Julie Res. Labs.
Kahn & Co.
Metrol Inc.
Minneapolis-Honeywell
  Rubicon Instrs.
Non-Linear Systems
Pacific Scientific
Phaostron Co.
Physics Research Labs
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Scott, Inc., Hermon H.
Sensitive Res. Instr.
Simpson Electric
Shallcross Mfg. Co
Southw. Indust. Electron
Thordardson-Meissner
United Optical Mfg.

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Borden Engrg. Div.
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Chicago Indus. Instr.
GE Apparatus Sales
General Electronic
General Radio Co.
Geophysical Instrument
Georator Corp.
Gray Instr. Co.
Heiland Div.
Industrial Insts., Inc
Leeds & Northrup
Keithley Insts., Inc
Miller, M. C.
Minneapolis-Honeywell
  Rubicon Instrs.
Physics Res. Labs., Inc
Rawson Electcl. Instr.
Roller-Smith
Sensitive Res. Instr.
Shallcross Mfg. Co.
Sticht Co., Herman H.

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Cal-Ohm Labs.
Curtiss-Wright
Davenport Mfg.
Dice Co., J. W.
Electro-Tech Equip.
Federal Telephone & Radio
Freed Transformer
GE, Apparatus Sales
Hewson Co.
Industrial Instrs., Inc.
Keithley Insts., Inc.
Leeds & Northrup
Martindale Elect. Co
Peschel Electronics
Precise Measmts. Co
Shallcross Mfg. Co.
Slaughter Co.
Southw. Ind. Electronics
Sticht Co., Herman H.
Sun Electric Corp.

RESISTANCE INDICATORS, Megohm

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American Paulin
Amer. Tradair Corp.
Associated Research
Bendix-Cincinnati
Biddle Co., James G.
Boone Instr.
Brush Instruments
Cal-Ohm Labs
California Magnetic
Cambridge Instr. Co.
Chicago Indust. Instr.
Clippard Instr. Lab.
Clough-Brengle
Curtiss-Wright
Davenport Mfg.
Dice Co., J. W.
Dit-Mco, Inc.
Electro Instr., Inc.
Electronic Devel. Lab.
Electro-Measurements
Electro-Mec Lab.
Electro Prods. Lab.
Electro-Tech Equipt.
El-Tronics Inc.
Federal Telephone & Radio
Feiler Engrg. Co.
Freed Transformer
GE, Apparatus Sales
General Radio Co.
Hermetic Sealing Corp.
Ill. Testing Labs.
Industrial Insts., Inc.
Kahn & Co.
Keithley Insts., Inc
Leeds & Northrup
Liquidometer Corp.
MacLeod & Hanopol
Martindale Electric
Measurements Corp.
Meters, Inc.
Newark Electric Co.
Niagara Elect. Instr.
Phaostron Co.
Physics Research
Pimex, Inc.
Precise Measurements Co
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Radio City Products
Rawson Electcl. Instr.
Reiner Electronics
Scientific Specialties
Sensitive Res. Instr.
Shallcross Mfg. Co
Sherron Metallic
Simpson Electric
Slaughter Co.
Southw. Indust. Electron
Sticht Co., Herman H.
Technology Instrument
Triplett Electcl. Instr.
Western Radiation Lab
Weston Instrs.
Winslow Co.

RESISTANCE INDICATORS, Milliohm

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Amelco, Inc.
Cal-Ohm Labs.
Chicago Indust. Instr. Co
Davenport Mfg. Co.
Dice Co., J. W.
Electro Instr., Inc.
Fed. Telephone & Radio
Hickok Elec. Instr.
Industrial Insts., Inc.
Pimex, Inc.
Radio City Products
Simpson Electric
Sticht Co., Herman H.
Sunshine Scientific
Tech Labs., Inc.

RESISTANCE INDICATORS, Ohm

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Associated Research
B & H Instr. Co.
Beckman Instruments
Beede Electcl. Instr.
Biddle Co., James G.
Boonton Radio
Borden Engrg. Div.
Bristol Co.
Cal-Ohm Labs.
Cambridge Instr. Co.
Chicago Indust. Instr.
Clippard Instr. Lab.
Clough-Brengle
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Electro Measmts. Inc.
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Electronic Instrument
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Esterline-Angus
Federal Telephone & Radio
Feiler Engrg. Co.
Freed Transformer
Gar Electcl. Instr.
GE, Apparatus Sales
General Electronic
General Radio Co.
Gray Instr. Co.
Greibach Instruments
Hewson Co., John
Hickok Electcl. Instr.
Industrial Instr. Co
Julie Res. Labs.
Kahn & Co.
Kellogg Switchboard
Leeds & Northrup
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Radio City Products
RCA Div.
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Reiner Electronics
Roller-Smith
Scientific Specialties
Sensitive Res. Instr.
Shallcross Mfg. Co
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Simpson Electric
Southw. Indust. Electron.
Sticht Co., Herman H.
Sunshine Scientific
Supreme, Inc.
Technology Instrument
Triplett Electcl. Instr.
Triumph Mfg. Co.
United Optical Mfg.
Virginia Electronics
Welch Mfg. Co., W. M.
Weston Instrs.

RESISTANCE LOADING EQUIPMENT

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Cole Instr. Co.
Davenport Mfg.
DeJur-Amsco
Eastern Specialty Co
GE, Apparatus Sales
Hardwick, Hindle, Inc.
International Resistance
Ohmite Mfg. Co.
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Rex Rheostat
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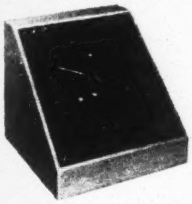

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Daven Co
Dmeter Mfg.
Eastern Prec. Resistor
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General Radio Co.
Genl. Resistance
Gray Instr. Co.
Indus. Instruments
Julie Res. Labs.
Leeds & Northrup
Minneapolis-Honeywell
  Rubicon Instrs.
Muirhead Instrument
Physics Res. Labs., Inc
Pimex, Inc.
Research Instr. Co.
Sensitive Res. Instr.
Shallcross Mfg.
Tech Labs. Inc
Winslow Co

RESISTANCE STANDARDS, see Standards, Resistance

RESISTANCE THERMOMETERS, see Thermometers, Electrical Resistance

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Driver-Harris
Hitemp Wires
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Kanthal Corp.
Newark Electric Co
Ney Co., J. M.
Precision Resistor Co.
Rodale Mfg. Co.
Secon Metals Corp

RESISTOR BOBBINS, Precision, Ceramic

Ace Plastic Co
Amer. Lava Corp
Centralab Div
Clarostat Mfg. Co
Dale Products
Du-Co Ceramics
General Ceramics
Internl. Resistance
Precision Resistor Co.
Polymer Corp. of Pa
Rinco Inc
Steatite Div.
Shallcross Mfg.
Stupakoff Div.
Superior Steatite
Telex. E-A Div.
Thermo Materials, Inc.
Thor Ceramics, Inc.
Waterbury Co's

RESISTOR CORES, Ceramic

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Du Co Ceramics
Electronic Mechanics
General Ceramics
International Prods. Co.
International Resistance
Lapp Insulator Co.
Mallory & Co., P. R.
O'Hara Waltham Mfg.
Saxonburg Ceramics
Shallcross Mfg.
Steatite Div.
Stupakoff Div.
Superior Steatite
Thermo Materials, Inc.
Thor Ceramics, Inc.

RESISTOR STANDARDS, see Standards, Resistance

RESISTORS, Adjustable

Ace Electronics
Aerovox Corp.
Allen-Bradley
Anatran Engrg. Corp.
Black, Sivalls & Bryson
Bourns Labs.
Cal-Ohm Labs.
Carter Parts Co.
Centralab Div
Chatham Electronics
Chicago Aerial Industs
Chicago Telephone Sup.
Clarostat Mfg. Co.
Continental Carbon
Corbetc tSience Labs
Cutler-Hammer
Dale Products Inc.
Daven Co.
Daystrom-Pacific
DeJur-Amsco
Dmeter Mfg.
Edcliff Instruments
Electro-Measurements
Electro-Mec Laboratory
Erie Resistor
Fairchild Camera
Foxboro Co.
GE, Apparatus Sales
General Radio
Goodyear Aircraft
Hardwick, Hindle, Inc.
Humphrey, Inc.
Instrument Resistors Co.
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I. T. E. Circuit Breaker
Lectrohm, Inc.
Leeds & Northrup
Lewis Engrg. Co.
Mallory & Co., P. R.
Minneapolis-Honeywell
  Rubicon Instrs.
Model Engrg. & Mfg.
Newark Electric Co.
Ohio Carbon Co.
Ohmite Mfg
Precision Line, Inc.
Precision Resistance Co
Reon Resistor
Resistors, Inc.
Rex Rheostat
Rinco Inc
Rochester Electronics
Spectrol Electronics Div
Sprague Electric
Stackpole Carbon
Sticht Co., Herman H
Technology Instrument
Topp Industries
Tru-Ohm Prods. Div.
Vectron Inc.
Walker-Jamieson
Ward Leonard
Welch Mfg. Co., W. M.
Welwyn International
Wirt Co.

RESISTORS, Ballast

Amperite Co., Inc.
Cal-Ohm Labs
Clarostat Mfg. Co.
Dmeter Mfg.
GE
Hardwick, Hindle, Inc.
Herzog Miniature Lamp
Instrument Resistors, Inc
Model Engrg. & Mfg.
Ohio Carbon
Ohmite Mfg. Co.
Precision Parts Co
Precision Resistor
Rex Rheostat
Switchcraft, Inc.
Tru-Ohm Prods. Div
Ward Leonard

RESISTORS, Carbon Composition and/or Variable

Ace Electronics
Aerovox Corp.
Allen-Bradley
Beck Bros.
Bendix, Eclipse Pioneer
Bendix-Pacific
Biddle Co., Jas. G
Black, Sivalls & Bryson
Bourns Labs.
Bristol Co.
Brown Electro-Measmt.
Carbon Div.
Central Scientific
Centralab Div.
Chicago Telephone Sup.
Cinema Engrg. Co.
Clarostat Mfg. Co.
Computer Instruments
Corbett Science Labs.
Cutler-Hammer
Dale Products
Daven Co
DeJur-Amsco
Eastern Specialty Co
Edcliff Instruments
Electro-Mec Labs.
Electro Mechanical Div.
Erie Resistor Corp.
Fairchild Camera
Federal Instr. Co
Ford Engrg. Co.
Ford Instr. Co.
Galetronics Corp.
GE, Apparatus Sales
General Radio
General Scientific Div
Genisco, Inc.
Giannini & Co
Glenco Corp.
Goodyear Aircraft
Gray Instr. Co.
Hansen Electronics
Hardwick, Hindle, Inc.
Helipot Corp
Instrument Resistors Co.
Insuline Corp.
International Resistance
Jarvis Electronics
Keystone Carbon
Lectrohm Inc.
Lectronic Research Labs
Leeds & Northrup
Lewis Engrg. Co
Librascope, Inc.
Mallory & Co., P. R
Markite Co.
Minneapolis-Honeywell
  Rubicon Instrs.
Morganite, Inc.
Natl. Carbon Co., Inc.
Natl. Elect. Controller
Newark Electric Co
Ohio Carbon Co.
Ohmite Mfg. Co.
Phaostron Co.
Physics Research
Precision Resistance
Reon Resistor Corp.
Resistors, Inc.
Rex Rheostat
Servotrol Co.
Shallcross Mfg.
Speer Carbon Co.
Stackpole Carbon
Sticht Co., Herman H.
Technology Instr. Div.
Texas Instruments
Thelen Co.
Topp Industries
United Optical
U. S. Instr. Corp.
Vectron Inc.
Victory Engrg. Corp
Ward Leonard
Welch Mfg. Co., W. M.

RESISTORS, Decade

Aerovox Corp.
Barnes Dev. Co
Bond Elect. Corp
Cal-Ohm Labs
Cinema Engrg. Co
Clarostat Mfg.
Consol. Research Co
Corbett Science Labs
Dale Products
Daven Co.
Dmeter Mfg.
Eastern Prec. Resistor
Electra Mfg. Co
Electro Measmets., Inc.
General Radio
General Resistance
Gray Instr. Co.
Hycor Div.
Industrial Insts., Inc.
Instrument Resistors
Internl. Resistance
Julie Res. Labs
Leeds & Northrup
Minneapolis-Honeywell
  Rubicon Instrs.
Muirhead Instrument
Ohmite Mfg.
Phaostron Co.
Physics Res. Labs., Inc.
Pimex, Inc
Precision Resistor Co.
RHO Engrg. Co.
Rinco Inc
Shallcross Mfg.
Tech Labs., Inc
Teletronics Labs., Inc.
Telex E-A Div.
Winslow Co., Inc.

RESISTORS, Deposited Carbon

Aerovox Corp.
Arnhold Ceramics
Brit. Electronic Sales
Clarostat Mfg.
Computer Instruments
Continental Carbon
Dale Products
Daven Co.
Electra Mfg. Co.
Erie Resistor
Hi-Q Div.
International Resistance
Mallory & Co., P. R.
Mepco, Inc.
Newark Electric Co
Phaostron Co.
Pyrofilm Resistor
Shallcross Mfg.
Sprague Electric
Texas Insts., Inc.
Victoreen Instr. Co.
Welwyn International
Wirt Co.

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✓Mica resistance elements
✓Resistance strips for temperature gauges
✓Erosion gauges*

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✓Semi-transparent mirrors
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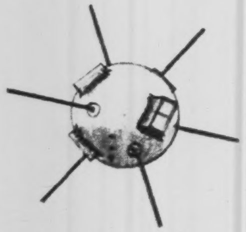
✓Interference films for Infrared
✓Anti-static coatings



*Metavac Resistance Strip used by Naval Research Laboratory on Vanguard Satellite to measure erosion caused by Meteor contact.

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RESISTORS, Encapsulated

Aerovox Corp
Allen-Bradley
Axel Bros. Inc
Bond Elect. Corp
Brit. Electronic Sales
Cal-Ohms Labs
Cinema Engrg. Co
Clarostat Mfg.
Continental Carbon
Corbett Science Labs
Consol. Research Co
Corning Glass Works
Dale Products
Daven Co.
Dmeter Mfg.
Eastern Prec. Resistor
Electra Mfg. Co.
Electro Insts., Inc
General Resistance
Hycor Div
Instr. Resistors Co
International Resistance
Julie Research Labs
K-F Devel. Co
Kelvin Electric Co
LR Electronics
Mepco, Inc.
Ohmite Mfg. Co
Polytechnic Res. & Devel
Precision Resistor Co
RHO Engrg. Co
Reon Resistor Corp
Resistance Prods. Co
Shallcross Mfg.
Spicer Co., Walter
Sprague Electric Co
Texas Instrs., Inc.
Victoreen Instr. Co
Welwyn International
Weston Instruments
Wirt Co.

RESISTORS, High Frequency

Aerovox Corp.
Arnhold Ceramics
Beck Bros.
Black, Sivalls, & Bryson
Bond Elect. Corp
Brit. Electron. Sales
Chicago Telephone Sup
Clark Controller
Clarke Instr. Corp.
Clarostat Mfg. Co
Corning Glass Works
Dale Products
Daven Co.
Empire Devices
Erie Resistor
Fish-Schurman
GE, Apparatus Sales
General Radio
Goodyear Aircraft
Hardwick, Hindle, Inc
Instrument Resistors Co.
International Resistance
I. T. E. Circuit Breaker
Julie Res. Labs.
Kay Electric
Leeds & Northrup
Madison Elect. Prods. Div
Measurements Corp
Metavac, Inc
Model Engrg. & Mfg.
Mepco, Inc
Ohio Carbon Co.
Ohmite Mfg. Co
Phaostron Co.
Polarad Electronics
Polytechnic Res. & Devel
Pyrofilm Resistor
Rex Rheostat
Resistance Prods. Co
Sangamo Electric
Shallcross Mfg.
Sprague Electric
Technology Instr. Div
WacLine, Inc.
Ward Leonard
Welwyn International
White Indust. Div., S. S.
Wirt Co.
Zenith Optical Lab.

RESISTORS, High Megohm

Aerovox Corp.
Allen-Bradley Co
Arnhold Ceramics
Bond Elect. Corp.
Clarostat Mfg.
Corbett Science Labs
Corning Glass Works
Dale Products
Daven Co
Dmeter Mfg
Federal Telephone & Radio
General Resistance
International Resistance
Mepco, Inc.
Ohio Carbon Co.
Osborne Electric
Pyrofilm Resistor
RHO Engrg. Co
Reon Resistor
Resistance Prods. Co.
Shallcross Mfg.
Sprague Electric
Stackpole Carbon
Victoreen Instr. Co.
Welwyn International
Westinghouse Electric
White Indust. Div., S. S.
Winslow Co.

RESISTORS, High Voltage

Arnhold Ceramics
Associated Research
Beck Bros.
Black, Sivalls & Bryson
Bond Electronics
Chicago Telephone Sup
Clark Controller Co.
Clarostat Mfg. Co.
Corbett Science Labs.
Corning Glass Works
Cutler-Hammer
Dale Products
Dmeter Mfg
GE, Apparatus Sales
General Resistance
Hardwick, Hindle, Inc.
Instrument Resistors Co.
International Resistance
I. T. E. Circuit Breaker
J B L Instr. Co.
K-F Devel. Co.
Kay Electric
Lectrohm, Inc.
Madison Elect. Prods. Co.
Mepco, Inc.
Micro-Circuits Co.
Ohio Carbon
Ohmite Mfg.
Precision Resistor Co
RHO Engrg. Co.
Reiner Electronics
Resistance Prods. Co.
Sensitive Res. Instr.
Shallcross Mfg.
Simpson Electric
Sprague Electric
Victoreen Instr. Co.
Ward Leonard
Welwyn International
Westinghouse Electric
Weston Instrs
White Indust. Div., S. S

RESISTORS, Manganin

Aerovox Corp.
Associated Research
Avion Instr. Corp.
Beck Bros.
Black, Sivalls & Bryson
Bond Electronics
Brown Electro-Measmt
Cal-Ohm Labs
Cinema Engrg. Co
Corbett Science Labs
Dale Products
Daven Co.
De Jur-Amsco
Dmeter Mfg
Eastern Prec. Resistor
Electro Insts., Inc.
Electro-Mec Laboratory
Electronic Devel. Lab
Federal Instr. Co.
General Radio Co
General Resistance
Gray Instr. Co
Hardwick, Hindle, Inc
Hycor Co., Inc.
I. T. E. Circuit Breaker
Instrument Resistors Co
Jarvis Electronics Corp
K-F Devel. Co.
Leeds & Northrup
Madison Elect. Prods. Div
Mepco, Inc.
Minneapolis-Honeywell
  Rubicon Instrs
Norton Electrical
Ohmite Mfg.
Osborne Electric
Pimex, Inc.
Precision Line Inc
Precision Resistor Co
RHO Engrg. Co
Radio City Products
Ram Meter, Inc
Reiner Electronics
Reon Resistor Corp
Resistance Prods. Co
Sensitive Res. Instr
Shallcross Mfg
Spicer Co., Walter
Sprague Electric
Winslow Co., Inc.

RESISTORS, Molded

Aerovox Corp.
Allen-Bradley
Beck Bros.
Bond Electronics
Cinema Engrg. Co
Clarostat Mfg.
Consol. Molded Prods.
Dale Products
Daven Co.
Eastern Prec. Resistor
Electra Mfg. Co
Erie Resistor Corp.
GE
General Resistance
Glass Products
Hycor Co., Inc.
I. T. E. Circuit Breaker
Instr. Resistors Co.
International Resistance
Keystone Carbon
Lectronic Research Labs
Mallory & Co., P. R.
Mepco, Inc.
Model Engrg. & Mfg
Ohio Carbon
Ohmite Mfg. Co
Precision Parts
Precision Resistor Co
RHO Engrg. Co.
Radio City Products
Reiner Electronics
Reon Resistor
Resistance Prods. Co
Shallcross Mfg.
Speer Carbon
Sprague Electric
Stackpole Carbon
Ward Leonard
White Dental Mfg. Co
White Indust. Div., S. S.
Wirt Co.

RESISTORS, Negative Temperature Coefficient

Arnhold Ceramics, Inc.
Bendix-Friez
Black, Sivalls & Bryson
Bond Electronics
Brit. Electronic Sales
Clarostat Mfg.
Corbett Science Labs
Corning Glass Works
Dale Products
Daven Co
Dmeter Mfg.
Electra Mfg. Co.
Erie Resistor
Federal Telephone & Radio
GE, Metallic Prods
General Resistance
Keystone Carbon
Mepco, Inc.
Micro-Circuits Co.
Model Engrg. & Mfg
Narda Corp.
Ohio Carbon
Phaostron Co.
Polytechnic Res. & Devel
Prec. Resistance Co.
Pyrofilm Resistor
RHO Engrg. Co
Reon Resistor
Rex Rheostat
Shallcross Mfg.
Sprague Electric
States Co.
Stupakoff Div.
Texas Instrs., Inc
Tru-Ohm Prods. Div.
Victoreen Instr. Co.
Victory Engrg. Corp.
Welwyn International
White Indust. Div., S. S.

RESISTORS, Non-Inductive

Allen-Bradley Co
Arnhold Ceramics
Associated Research
Automatic Electric
Avion Instr. Co.
Black, Sivalls & Bryson
Bond Electronics
Brit. Electronic Sales
Brown Electro-Measmt
Cal-Ohm Labs
Cinema Engrg. Co
Clarostat Mfg. Co.
Consol. Research Co
Continental Carbon
Corbett Science Labs
Corning Glass Works
Dale Products
Daven Co.
Dmeter Mfg
Eastern Prec. Resistor
Electra Mfg. Co
Electro-Measmts. Inc
Electro-Mec Lab
Elektro-Serv Co.
GE
General Radio
General Resistance
Gray Instr. Co.
Hardwick, Hindle, Inc.
Hycor Co
Instrument Resistors Inc.
International Resistance
Ircal Industries
I. T. E. Circuit Breaker
K-F Devel. Co.
Kay Electric
Lectrom, Inc.
Leeds & Northrup
Mepco, Inc.
Model Engrg. & Mfg.
Micro-Circuits Co.
Mineapolis-Honeywell
  Rubicon Instrs
Muirhead Instrument
Ohio Carbon
Ohmite Mfg.
Osborne Electric
Phaostron Co.
Physics Research
Polytechnic Res. & Devel
Precision Resistance Co.
Precision Resistor Co
Pyrofilm Resistor
RHO Engrg. Co.
Reon Resistors Corp.
Reosearch Instr. Co
Resistance Prods. Co
Resistors, Inc.
Rex Rheostat
Sangamo Electric
Shallcross Mfg. Co.
Spicer Co., Walter
Sprague Electric
States Co.
Texas Insts. Inc.
Tru-Ohm Prods. Div
Ward Leonard
Welwyn International
Western Radiation Lab.
Weston Instrs
Winslow Co., Inc.
Wirt Co.

RESISTORS, Precision (accuracy better than 1%)

Ace Electronics Assoc. Inc
Aerovox Corp.
Allen-Bradley Co
Arnhold Ceramics
Axel Bros. Inc
Bond Electronics
Cal-Ohm Labs
Carol Electronics
Chicago Aerial Industs
Cinema Engrg. Co
Clarostat Mfg. Co.
Consol. Res. Co.
Corbett Science Labs.
Corning Glass Works
Dale Products
Daven Co.
Daystrom Instrument
Dmeter Mfg.
Eastern Prec. Resistor
Eastern Specialty Co
Edcliff Instruments
Electra Mfg. Co
Electro Insts., Inc
Electro Measmts. Inc
Electromath Corp
Electro-Mec Lab.
Electronic Prods. Co
Eppley Lab.
Fairchild Camera
Fairchild Controls Corp
Gamewell Co.
GE
General Radio
General Resistance
General Transistor
General Winding Co
Glass Products
Gray Instr. Co.
Hardwick, Hindle, Inc
Herzog Miniature Lamp
Hycor Div
Industrial Instrs
Instr. Resistors Co.
International Resistance
Jarvis Electronics
Julie Res. Labs
K-F Devel. Co.
Kelvin Electric Co
Keystone Carbon
Leeds & Northrup
Maurey Inst. Corp
Mepco, Inc.
Metavac, Inc.
Micro-Circuits Co
Minneapolis-Honeywell
  Rubicon Instrs
Model Engrg. & Mfg
Morrill & Morrill
Muirhead Instrument
Natl. Technical Labs.
Ohmite Mfg.
Osborne Electric
P. C. A. Electronics
Phaostron Co.
Pimex, Inc.
Polytechnic Res. & Devel
Precision Line, Inc
Precision Resistor Co
Pyrofilm Resistor
RHO Engrg. Co.
Reon Resistor Corp
Research Instr. Co
Resistance Prods. Co.
Rinco, Inc
Sage Electronics
Servonic Instruments
Shallcross Mfg
Spectrol Electronics Div
Spicer Co., Walter
Sprague Electric Co
Technique Associates
Texas Insts., Inc.
Victoreen Instr. Co
Ward Leonard Elec. Co
Westinghouse Electric
Weston Instrs
Winslow Co.

RESISTORS, Tape

B & H Instr. Co.
Gray Instr. Co.
Guiton Industries
Hansen Electronics
Micro-Circuits Co.
Phaostron Co
Sanders Assocs.

RESISTORS, Temperature Sensitive, see Thermistors

RESISTORS, Voltage Sensitive, see Varistors

RESISTORS, Wire Wound (2 watts and under)

Ace Electronics Assoc. Inc
Aerovox Corp.
Automatic Electric
Bond Electronics
Bourns Labs
Brit. Electronic Sales
Cal-Ohm Labs
Centralab Div
Chicago Aerial Industs
Cinema Engrg. Co.
Clark Controller
Clarostat Mfg. Co.
Consol. Res. Co
Corbett Science Labs
Dale Products
Daven Co
Daystrom-Pacific
Dmeter Mfg.
Eastern Prec. Resistor
Edcliff Instruments
Electro-Measurements
Electromath Corp
Electro-Mec Laboratory
GE
General Radio
General Resistance
Hycor Div.
Instr. Resistors Co.
Insuline Corp.
International Resistance
K-F Devel. Co.
Kelvin Electric Co
Lectrohm, Inc.
Mallory & Co., P. R.
Mepco, Inc.
Miniature Elec. Comp. Co
Minneapolis-Honeywell
  Rubicon Instrs
Muirhead Instrument
Newark Electric Co.
Ohio Carbon Co.
Ohmite Mfg. Co
Osborne Electric
Phaostron Co.
Precision Resistor Co
RHO Engrg. Co
Research Instr. Co
Resistance Prods. Co
Resistors, Inc.
Servonic Instruments
Shallcross Mfg.
Spectrol Electronics Div
Spicer Co., Walter
Texas Insts., Inc.
U. S. Instr. Corp.
Ward Leonard Elec. Co
Welwyn International
Winslow Co.
Wirt Co.

RESISTORS, Wire Wound, (2 to 35 Watts) (see also Rheostats)

Aerovox Corp
Arnhold Ceramics
Brit. Electronic Sales
Cal-Ohm Labs
Centralab Div
Clark Controller
Clarostat Mfg
Dale Products
DeJur-Amsco
Electrocraft Corp
GE, Apparatus Sales
General Radio
Hardwick, Hindle, Inc
Instr. Resistors Co.
International Resistance
Kelvin Electric Co
Lectrohm, Inc
Mallory & Co., P. R.
Mepco, Inc
Model Engrg. & Mfg
Newark Electric Co
Ohio Carbon
Ohmite Mfg
Resistors, Inc
Sage Electronics
Shallcross Mfg
Sprague Electric
Tru-Ohm Prods. Div.
Ward Leonard
Welwyn International
Westinghouse Electric
Wirt Co.

RESISTORS, Wire Wound (35 to 500 Watts) (see also Rheostats)

Aerovox Corp
Arnhold Ceramics
Bond Elect. Corp
Brit. Electronic Sales
Cal-Ohm Labs.
Clark Controller
Clarostat Mfg. Co.
Cutler-Hammer
Dale Products
GE, Apparatus Sales
Electrocraft Corp
Hardwick, Hindle, Inc.
International Resistance
Lectrohm, Inc.
Mallory & Co., P. R.
Microloc Corp
Model Engrg. & Mfg
Monitor Controller Co.
Newark Electric Co
Ohio Carbon Co.
Ohmite Mfg. Co.
Resistors, Inc
Rex Rheostat
Shallcross Mfg. Co.
Sprague Electric
Tru-Ohm Prods. Div.
Ward Leonard
Welwyn International
Westinghouse Electric
Wirt Co.

RESISTORS, Wire Wound, (500 to 1500 watts) (see also Rheostats)

Brit. Electronic Sales
Cal-Ohm Labs
Clark Controller Co.
Cutler-Hammer
GE Apparatus Sales
Mallory & Co., P. R.
Model Engrg. & Mfg
Mullenbach Div.
Ohmite Mfg. Co.
Rex Rheostat
Shallcross Mfg. Co
Tru-Ohm Prods. Div.
Ward Leonard

RESISTORS, Woven

Clarostat Mfg. Co
Leeds & Northrup
Model Engrg. & Mfg
Rex Rheostat
States Co.

RESOLVERS, see Synchros

RESTORERS, Thermocouple, see Thermocouple Circuit Tester

RETICLES

American Optical
Bausch & Lomb
Bendix-Eclipse Pioneer
Birtcher Corp
Bronoptics Co.
Brunson Inst. Co.
Buhl Optical
Bushnell Co
Davidson Mfg
Dearborn Glass
Dearborn Scientific
Eastman Kodak Co.
Edmund Scientific
Edna Lite Co.
Ercona Corp.
Engineers Specialty Div.
Engis Equipt. Co
Farrand Optical
Ferner Co., R. Y.
Fish-Schurman
Gaertner Scientific
Glass Prods.
Glendale Optical
Goerz Amer. Optical
Gurley, W. & L. E.
International Optical
Herd & Co.
Jaegers, A.
Koehler, W. F.
Leroy Clausing Co.
Levy & Co., Max
Lynn, Robert M.
Meyer Opticraft
Mico Instr. Co.
Model Engrg. & Mfg
Molded Insulation Co.
Nichols, Lyman
Pacific Univ. Prods. Corp
Palos Optical
Photoplating Co
Plummer & Kershaw
Practo Photo Accs. Corp
Precision Prods. Co.
Ransom Labs.
Regal Instr. Co.
Renick Co., L. C.
Schneider-Cogswell
Titen Marketing Co
Tinsley Labs.
Texas Insts., Inc
Zenith Optical Co
Zenith Optical Lab.

REVOLUTION COUNTERS, see Counters, also Tachometers

RHEOSTATS, Battery Charging

Allen-Bradley
Amperite Co.
Beck Bros.
Black, Sivalls & Bryson
Centralab Div
Clark Controller Co.
DeJur-Amsco
Hardwick, Hindle, Inc
International Resistance
Mallory & Co., P. R.
Mepco
Model Engrg. & Mfg
Natl. Elect. Controller
Ohmite Mfg. Co.
Rex Rheostat
Tru-Ohm Prods. Div
Ward Leonard

RHEOSTATS, Field

Black, Sivalls & Bryson
Clark Controller Co.
Clarostat Mfg.
Corbett Science Lab.
Cutler-Hammer
Daven Co
Dittmore & Freimuth
GE, Apparatus Sales
Hardwick, Hindle, Inc.
Mallory & Co., P. R.
Model Engrg. & Mfg.
Natl. Elect. Controller
Ohmite Mfg. Co.
Rex Rheostat
Tru-Ohm Prods. Div.
Ward Leonard

RHEOSTATS, Laboratory and/or Meter Testing

Ace Glass Inc.
Allen-Bradley
Amer. Instr. Co.
Beck Bros.
Beckman Instr. Div.
Biddle Co., Jas. G.
Black, Sivalls & Bryson
Borg Equipt. Div.
Bourns Labs.
Brown Electro-Measmt
Central Scientific
Chicago Apparatus Co.
Clarostat Mfg
Corbett Science Lab.
Daven Co
DeJur-Amsco
Eastern Spec. Co.
Edcliff Instruments
Electro-Mec Lab.
Electronic Associates
Electro-Tech Equip
Ford Engrg. Co.
G-M Labs.
GE, Apparatus Sales
General Radio Co.
Gray Instr. Co.
Hardwick, Hindle, Inc.
Helipot Div.
Leeds & Northrup
Mallory & Co., P. R.
Minneapolis-Honeywell
  Rubicon Instrs
Model Engrg. & Mfg.
Natl. Elect. Controller
Ohmite Mfg.
Perkin-Elmer
Research Instr. Co
Rex Rheostat
Samarius Electronics
Schaefer Bros.
Shallcross Mfg.
States Co.
Sticht Co., Herman H.
Tech Labs., Inc.
Technology Instr. Div
Thwing-Albert
Tru-Ohm Prods. Div.
Ward-Leonard
Welch Mfg. Co., W. M.
Zeiss, Inc., Carl

RHEOSTATS, Slide Wire and Variable (see also Resistors)

Ace Electronics
Allen-Bradley
Amer. Instr. Co.
Amperite Co., Inc.
Analogue Controls
Beck Bros.
Beckman Instr. Div.
Biddle Co., James G.
Black, Sivalls & Bryson
Borg Equipt. Div.
Bourns Labs.
Brown Electro-Measmt
Cal-Ohm Labs
Carter Parts Co.
Central Scientific
Chicago Apparatus Co
Cinema Engrg. Co.
Clark Controller Co.
Computer Instruments
Corbett Science Labs
Cutler-Hammer
Daven Co.
DeJur-Amsco
Eastern Specialties
Edcliff Instruments
Electro-Measurements
Electro-Mec Lab
Ford Engrg. Co
G-M Labs., Inc.
Gallien, R. P.
GE
General Radio Co
Giannini & Co.
Gray Instr. Co
Hardwick, Hindle, Inc
Helipot Corp.
Jadow Inc., B.
Jarvis Electronics
Jelliff Mfg. Co
Leeds & Northrup
Mallory & Co., P. R.
Minneapolis-Honeywell
  Rubicon Instrs
Model Engrg. & Mfg
National Elect. Controller
Ohmite Mfg. Co.
Perkin-Elmer
Precision Line Inc.
Precision Parts Co.
Precision Resistor Co.
Research Instr. Co
Rex Rheostat
Samarius Electronics
Shallcross Mfg.
Spectrol Electronics Div
Stackpole Carbon
Standard Science Supply
Sticht Co., Herman H.
Tech Labs., Inc
Technology Instr. Div.
Thwing-Albert
Tru-Ohm Prods. Div.
U. S. Instr. Corp
Van Dyke Instruments
Vectron, Inc
Ward Leonard
Welch Mfg. Co., W. M.
Winslow Co
Wirt Co.

RIBBON, Metal, Rolled to Small Fractional Dimensions

Alpha Metals
Aluminum Co. of Amer
Amer. Platinum Works
Amer. Silver Co.
Arnold Engrg. Co
Baird Atomic
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Cohn Corp., Sigmund
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RINGS, COLLECTOR, see Slip Rings

RODS, Amber

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Belmont Smelt. & Ref.
Beryllium Corp.
Driver Co., Wilbur B.
Heitz, Karl, Inc.
Instruments Spec. Co.
Mallory & Co., P. R.
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Res. Devel. Manufacture
Scovill Mfg. Co.
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Corning Glass Works
Du-Co Ceramics
Electronic Mech., Inc.
Fish-Schurman
General Ceramics
Insuline Corp.
Lapp Insulator
Leroy Clausing Co.
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Steatite Div.
Stupakoff Div.
Superior Steatite
Technical Soldering Co.
Thermo Materials, Inc.
Thor Ceramics, Inc.
U. S. Stoneware Co.

RODS, Fused Quartz

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Bliley Electric
Edna Lite Co.
Esco Products
Fish-Schurman
GE, Lamp Dept.
Greiner Glassblowing Lab
Hanovia Chem. & Mfg.
Phoenix Prec. Instr
Prec. Glass Prod. Co.
Regal Instr. Co.
Thermal Syndicate, Ltd.
Therm. Amer. Fsd. Quartz
Torrance Glass & Color
Valpey Crystal Corp.

RODS, Glass

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Bache & Co., Semon
Bird & Co.
Bushnell Co., D. P.
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Crystal Glass Tube
Edna Lite Co.
Fish-Schurman
Friedrich & Dimmock
Glasscraft Co.
Greiner, Emil
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Lynn, Robert M
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Internat. Prods. Co.
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Mica Insulator
Monsanto Chemical
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Phipps & Bird
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Rex Corp.
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Geartronics Corp
Heitz, Inc., Karl
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RODS, Platinum and Precious Metals

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Cohn Corp., Sigmund
Deringer Metallurgical
Fineisen, A. R.
General Plate Div.
Handy & Harman
Linde Co
Newall Mfg. Co.
Ney Co.
Secon Metal Corp.
Sherman & Co.
Wilson Co., H. A.

RODS, Sapphire

Bird & Co.
Elgin Natl. Watch
Ferner Co., R. Y.
Gatti, Aurele M.
Imetra Co. Ltd.
Kearfott Co., Inc.
Keller, Jr., Hugo P.
Keller & Co., L. H.
Linde Co.
Vallorbs Jewel Co.
Worley Jewel Co.

RODS, Thermostat Metal

Baker & Co.
General Plate Div.
Simonds Saw & Steel
Wilson Co., H. A.

ROSINS

Alpha Metals, Inc
Division Lead Co.
Good, Inc., James
Harshaw Chemical
Zophar Mills, Inc.

ROTAMETERS, see Flowmeters, Area

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E & W Optical Co
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Gallien, R. P.
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Goodyear Tire
Hamilton Rubber Mfg.
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RUBBER, Lathe Cut

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Raybestos-Manhattan
Richardson Co.
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Garlock Packing
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Penn Optical & Instr
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Renick Co.
Scientific Glass App
Teichert Engrg. Co

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Post Co., Frederick
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RULES, Precision Standard

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Bowen & Co.
Brown & Sharpe
DoAll Co.
Engineers Specialty Div
Engis Equipt. Co.
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Kimble Glass
Moeller Instr. Co.
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Owens-Illinois Glass
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Ruttco Mfg. Co.
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SAFETY VALVES, see Valves, Relief

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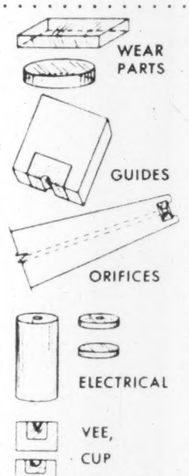

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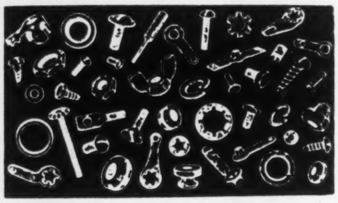

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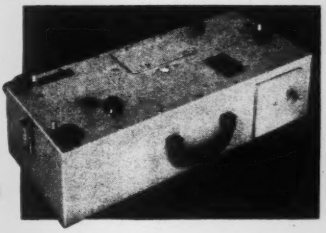

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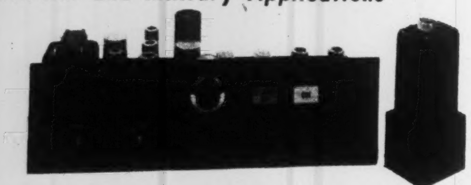

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Wilson Co., H. A.

SHEETS, Columbium, Molybdenum

Cleveland Tungsten, Inc
Fansteel Metallurgical
North Amer. Phillips

SHEETS, Fibre

Armstrong Cork Co.
Auburn Mfg. Co.
Biggs Co., Carl H.
Blossom Mfg. Co.
Continental-Diamond Fibre
Felt Products
Gair Co., Inc.
Garlock Packing
Insulation Mfrs. Corp
Mitchell Rand Insulating
Natl. Vulcanized Fibre
Spaulding Fibre Co.
National Tel-Tronics
Wilmington Fibre

SHEETS, Hard Rubber and Rubber

Amer. Hard Rubber
Armstrong Cork Co.
Atlantic India Rubber
Auburn Mfg. Co.
Carlyle Rubber
Darcold Co., Inc.
Detroit Gasket & Mfg
DuPont
Felt Products
Garlock Packing Co.
Goodrich Co., B. F.
Goodyear Tire & Rubber
Goshen Rubber
Hamilton Rubber
Luzerne Rubber
New York Rubber
Popper & Klein
Raybestos-Manhattan
Richardson Co.
Rubatex Div.
Sponge Rubber Prods.
Stokes Rubber
U. S. Rubber

SHEETS, Alloy, Special Corrosion Resistant

Driver Co., Wilbur B.
General Plate Div.
Haynes Stellite
Jessop Steel Co.

SHEETS, Kovar

Driver-Harris
Simonds Saw & Steel
Stupakoff Div.
Universal-Cyclops

SHEETS, Monel and Nickel

Amer. Phenolic
Amer. Silver Co.
Crucible Steel
Driver Co., Wilbur B
Driver-Harris
Sherman & Co.

SHEETS, Plastic

Allegheny Plastics
Allied Engraving
Amer. Hard Rubber
Amer. Phenolic
Auburn Mfg. Co.
Bakelite Div.
Balfor Industries
Bel-Art Products
Blossom Mfg. Co
Blum & Co., Julius
Carbide & Carbon
Carroll Co.
Cast Optics
Chicago Molded Prods
Commercial Plastics Co
Conn-Craft Co.
Continental-Diamond Fibre
Crane Packing Co.
Dow Chemical Co
DuPont
Dura Plastics
Dynakon Corp.
Eastman Kodak
Electronic Mechanics, Inc
Emerson & Cuming, Inc
Felsenthal & Sons
Formica Co.
Garlock Packing Co.
GE Laminated Prods
GE, Textolite Dept.
Germanow-Simon Mach. Co
Goodrich Co., B. F.
Hermes Engravers
Insulation **Mfrs.** Corp.
Insuline Corp. of Amer.
Keller **Products**
Mica Insulator
Mico Instr. Co.
Monsanto Chemical
Natl. Vulcanized Fibre
New England Laminates
Parisian Novelty Co.
Phipps & Bird, Inc.
Plastilight, Inc.
Polymer Corp.
Printloid, Inc.
Pyramid Plastics
Raybestos-Manhattan
Resistoflex Corp.
Rex Corp.
Richardson Co
Rohm & Haas
Rubatex Div.
Sierracin, Inc.
Sillcocks-Miller
Spaulding Fibre Co
Surprenant Mfg. Co
Synthane Corp.
Taylor Mfg. Co.
U. S. Gasket Co.
U. S. Rubber
Valley-National Corp.
Warwick Products
Westinghouse Electric
Wilmington Fibre

SHEETS, Pre-Finished, (Nickel, Chromium)

Amer. Silver Co.
Chase Brass & Copper
Crucible Steel
Driver Co., Wilbur B
Driver-Harris
Jessop Steel Co.
Metal Goods Corp
Sherman & Co

SHEETS, Steel and Stainless Steel

Allegheny Ludlum Steel
Amer. Silver Co.
Armco Steel Corp
Bar-Ray Prods.
Crucible Steel
Disston & Sons, Inc.
Driver Co., Wilbur B.
Ferner Co.
Hubbell Metals
Jessop Steel
Michigan Steel Cast. Co.
Schnitzer Alloy Prods
Simonds Saw & Steel

SHIELDING MAGNETIC see Magnetic

SHIELDS, Lead

Advanced Products Co
Alpha Metals
Baird-Atomic
Bar-Ray Products
Division Lead Co.
Emerson & Cuming, Inc
Federated Metals Div.
Hamner Electronics
Hi Grade Alloy Corp
Instruments Inc
Nuclear-Chicago
Nucleonics Corp of Amer
NRD Instr. Co.
Radiation Instr. Dev. Lab
Staver Co., Inc.
Technical Assoc
Tracerlab, Inc
Warren Bros. Mfg. Co

SHIELDS, Transformer

Allegheny Ludlum Steel
Jan Hardware Mfg. Co.
Magnetics, Inc.
Millen Mfg. Co.
Rapidan Mfg. Co

SHIELDS, Tube

Allegheny Ludlum Steel
  Corp.
Amphenol Electronics
Atlas E-E Corp.
Birtcher Corp.
Cinch Mfg. Co.
Collins **Radio** Co.
Communication Access
DuMont Labs., Allen B.
Elco Corp.
Insuline Corp.
International Elect. Res.
Intl. Electronic Res.
Jan Hardware Mfg. Co
Johnson Co., E. F.
Magnetics, Inc.
Metal Textile Corp.
Millen Mfg. Co.
Precision Tube Co
Sealectric Switch & Relay
Staver Co., Inc.
Suffolk Products
Sylvania Elect. Prods
Waterman Products
Waldom Electronics

SHIM STOCK

Albany Prods. Co.
Amer. Silver Co.
Auburn **Mfg.** Co.
Continental Rubber Wks
Crucible Steel
Ferner Co.
Fitzgerald Mfg. Co.
Goodrich Co., B. F.
Jessop Steel Co.
Laminated Shim Co
Mallory & Co., P. R.
Metal Goods Corp.
Natl. Vulcanized Fibre
Penn Precision Prods
PIC **Design** Corp.
Spaulding Fibre Co.

Staver Co., Inc.
Werner Co., Inc., R. D.
Whitehead Stamping Co.
Wilson Co., H. A.

SHIP LOGS, see Marine Instruments

SHIPBORNE INSTRUMENTS, see Marine Instruments

SHOCK MOUNTINGS, see Mountings

SHUNTS, Including Shunt Meters

Aerolite Electronics
Assembly Products
Associated Research
Audio Instr. Co.
Bradshaw Instruments
Clarostat Mfg. Co.
Columbia Elect. Mfg.
DeJur-Amsco
Electro-Mech. Instr.
Electronic Devel. Lab.
Esterline-Angus
GE, Apparatus Sales
Gray Instr. Co.
Hickok Electcl. Instr.
Instrument Resistors, Inc.
Internat. Resistance Co.
Leeds & Northrup
Lewis Engrg. Co.
Madison Elect. Prods.
Minneapolis-Honeywell
  Rubicon Instrs.
Norton Electcl. Instr.
Phaostron Co.
Physics Research
Precision Resistor Co.
Radio City Products
Ram Meter, Inc.
Rawson Electcl. Instr.
Reiner Electronics
Roller-Smith
Sangamo Electric
Sensitive Res. Instr.
Shallcross Mfg.
Std. Science-Sup.
Simpson Electric
Sittler Corp.
Stewart-Warner
Sun Mfg. Co.
Texas Instrs., Inc.
Triplett Electcl. Instr.
United Optical
Welch Mfg. Co., W. M.
Westinghouse Electric
Weston Instrs.
Winslow Co.

SHUNTS, Ayrton

Eastern Specialty
Fisher Scientific
Gray Instr. Co.
Hickok Elec. Instr.
Leeds & Northrup
Minneapolis-Honeywell
  Rubicon Instrs.
Physics Res. Labs.
Precision Resistor Co.
Ram Meter, Inc.
Sensitive Res. Instr.
Shallcross Mfg. Co.
Welch Mfg. Co., W. M.
Winslow Co.

SHUNTS, Standards, see Standards, Shunt

SIEVE SHAKERS

Amer. Instr. Co.
Central Scientific
Dietert Co.
Grain Lab Equipt.
Gump Co., B. F.
Humboldt Mfg. Co
La Pine & Co., A. S.
Precision Scientific
Soiltest, Inc.
Syntron Co.
Williams Apparatus

SIEVES, Testing

Amer. Instr. Co.
Boekel & Co.
Central Scientific
Custom Scientific Insts.
Dietert Co.
Fisher Scientific
Gordon Co., Claud S.
Grain Lab. Equipt.
Humboldt Mfg. Co.
La Pine & Co., A. S.
Precision Scientific
Riehle Div.
Scientific Instr. Co.
Soiltest, Inc.
Syntron Co.
Thomas Co., Arthur H.
Weber Brothers Metal

SIGHT FLOW BUBBLERS

Bailey Meter Co.
Bristol Co.
Bronoptics Co.
Brooks Rotameter
Conoflow Corp.
Fischer & Porter Co.
Foxboro Co.
Industrol Corp.
Jordan Reg. Corp.
King Engrg.
Meriam Instr. Co.
Moore Products
Precision Glass Prods.
Uehling Instr. Co.

SIGHT FLOW INDICATORS, see Flowmeters, Sight

SIGHT METERS, see Flowmeters, Sight

SIGHTS, Gun, Telescopic

Amer. Optical
Bausch & Lomb
Bell & Howell
Bronoptics Co.
Buhl Optical
Bushnell Co., D. P.
Clark & Sons
Daco Instrument
Ercona Corp.
Fecker, Inc.
Helio Instr. Co.
Internat. Devel. Co.
Kollmorgen Optical
Kollsman Instr. Corp.
Leupold & Stevens
Lindly & Co.
Lynn, Robert M.
Meyer Opticraft
Norden-Ketay
Pacific Optical
Palos Optical
Perkin-Elmer
Plummer & Kershaw
QOS Corp.
Regal Instr. Co
Simpson Optical
Tinsley Labs.
Unertl Optical
Zeiss, Inc., Carl

SIGNAL GENERATORS see Generators

SIGNAL LIGHTS, see Pilot Lights

SIGNALING DEVICES, Automatic, see Monitors

SIGNALING DEVICES, Traffic, see Traffic

SILICA, Fused and/or Vitreous

Amersil Co.
Carbide & Carbon
Cooper-Hewitt Electric
Corning Glass Works
Crystal Research Labs.
Engelhard, Charles
Fish-Schurman
GE
Gordon Co., Claud S.
Hanovia Chem. & Mfg.
Machlett & Son
Prec. Glass Prods. Co
Semimetals, Inc.
Thermal Amer. Fused Quartz
Thermal Syndicate
Torrance Glass & Color
Wagner Co., Inc., Chas.

SILK and RAYON TEST INSTRUMENTS, including Cohesion Testing Machines

Atlas Electric Devices
Brabender Corp.
Custom Scientific Insts.
Dynamics Res. Assoc.
Geier & Bluhm, Inc.
Scott Testers, Inc.
Testing Machines, Inc.
U. S. Testing Co.

SILVER, see Precious Metals

SIMULATORS, Flight, Including Flight Tables

Aircraft Armaments
Allegany Instr. Co.
Amer. Mach. & Foundry
Bell Aircraft Corp.
Bendix, Computer Div.
Calif. Tech. Indus.
Consolidated Avionics
Control Electronics
Control Specialists, Inc.
Cook Electric
Curtiss-Wright
Donner Scientific
Dynamics Res. Assoc.
EPR Special Prods.
Electronic Associates
Engrg. & Research Corp.
Erco Div.
Fecker, Inc., J. W.
Genl. Prec. Lab.
Goodyear Aircraft
Guardian Elec. Mfg.
Hickok Elec. Instr.
Hieatt Engrg. Co.
Kaiser Aircraft & Elect.
Link Aviation
Mast Devel.
Micro Gee Prods.
Mid-Century Instrumatic
Radio City Products
Ramo-Wooldridge
Sanders Associates
Servonics, Inc.
Stavid Engrg., Inc.
Union Switch & Signal

SINE BARS, see Dimensional Gages

SINTERED CARBIDE SPECIALTIES

Fansteel Metallurgical
Fineisen, A. R.
GE, Metall. Prods.
Hamilton Watch
Willey's Carbide Tool Co.
Wilson Co., H. A.
Worley Jewel Co., John

SLIDERULES, Engineering Calculation

Allegheny Plastics
Allied Engraving
Automatic Control Co
Carroll Co.
Graf-Apsco Co
Post Co., Frederick
Smith Co., Arthur F.
Wabash Insts. & Spec.

SLIP RINGS

Airflyte Electronics
Breeze Corporations
Collectron Corp.
Computer Insts. Corp.
Electro Devel. Corp.
Electro-Miniatures Corp
Electro Tec Corp.
GE Clock & Timer Dept.
General Plate Div.
Graphite Metallizing
Instr. Devel. & Mfg.
Lear, Inc.
Ney Co., J. M.
Polyphase Instr. Co.
Precision Mfg. Co.
Schaevitz Engineering
Servonic Instruments
Slip Ring Co. of Amer.
Telex, Inc.

SLOW MOTION STUDY EQUIPMENT

Annis Co.
Bell Howell Co.
Berndt-Bach, Inc.
Boulin Instr. Corp.
Cox Instruments
Davenport Mfg.
Electro-Mechanical Dev. Co.
Ercona Corp.
Fruengel Inc., Frank
General Radio Co.
Gordon Enterprises
Hycon Electronics
Jack Scient. Instr. Co.
Traid Corp.
Vought Co.
Wollensak Optical

SLUMP CONES, see Pyrometric Cones

SMOKE DENSITY INDICATORS and/or RECORDERS

Anton Electronic Labs.
Bacharach Indust. Instr.
Bailey Meter Co.
Barber-Colman
Basic Controls, Inc.
Bristol Co.
Cleveland Controls
Combustion Control Div.
Davenport Mfg. Co.
Denver Fire Clay Co.
De-Tec-Tronic Corp.
Diatron Co.
Dickson Co.
Edwards, L. V.
Electronic Control Corp.
Electronics Corp. of Amer.
Electron-Radar Prods.
Ess Instr. Co.
GE, Apparatus Sales
General Television Corp.
Heat-Timer Corp.
Instr. Devel. Labs.
Larson Instr. Co.
Leeds & Northrup
Lucian Labs.
Lumenite Electronic Co.
McNeil Engrg. Co.
Mine Safety Appliances
Phoenix Prec. Instr.
Photobell Co.
Photovolt Corp.
Reliance Instr. Mfg. Corp.
Smok-Trol Corp.
Testing Machines, Inc
Thwing-Albert
Weston Instrs.
Williams, Brown & Earle
Worner Electronics

SMOOTHNESS RECORDERS, see Dimensional Gages, Surface

SNAP FASTENERS

Aircraft Radio Corp.
Dimco-Gray
Scovill Mfg. Co.
United-Carr Fastener
Winslow Co., Inc.

SNUBBERS, see Pressure Snubbers

SOCKETS, Lamp

Aerolite Electronics
Alden Products
Amer. Phenolic Corp.
Ampco Mfg. Co.
Autom. Electric
Cannon Electric
Circon Component Co.
Dialight Corp.
Dixon, Inc., William
Drake Mfg. Co.
Eby, Inc., Hugh H.
Franklin Mfg. Co
Gates & Co.
GE
Indus. Hardware Mfg.
Insuline Corp. of Amer.
Johnson Co., E. F.
Kirkland Co., H. B.
Kulka Elect. Mfg.
Lenz Elect. & Mfg. Co
Mallory Co., P. R.
Molded Insulation Co.
National Tel-Tronics
Northam-Warren
Pyle-National Co.
Rodale Mfg. Co.
Scovill Mfg. Co.
Signal Indicator Corp.
Smith, Inc., Herman H.
Stromberg-Carlson
Sylvania Elect. Prods.
Watertown Mfg. Co.

SOCKETS, Printed Circuit

Alden Products
Ampco Mfg. Co.

ELDEC
High quality
SLIP RING
& BRUSH HOLDER
ASSEMBLIES
MEET YOUR MOST RIGID
REQUIREMENTS

Precision ELDEC slip rings are molded in one piece for maximum insulation, high dielectric strength and higher hi-pot. Concentricity .002" T.I.R. or better. Miniaturized to .023" (2 rings) .035" (3 rings) .060" (9 rings). Sizes up to 18". Four micro-inch finishes are standard with higher finish as required.

See nearest representative or send us your requirements.

ELECTRO DEVELOPMENT CO.

14701 Keswick St., Van Nuys, Calif.

ELECTRO REPRESENTATIVES

Bardwell & Schoelles Assoc.
P. O. Box 105
Rochester, N. Y.

Grant Shaffer Company
14241 Fenkel Ave.
Detroit 27, Michigan

Col-Ins Company
317 W. Forsyth St.
Jacksonville 2, Florida

E. A. Dickinson & Assoc.
744 No. 4th St.
Milwaukee, Wisconsin

Varrelman-Gorman Co.,
Box 503, Hicksville, N. Y.

Scott & Steffen, Inc.
1836 Euclid Ave.
Cleveland 15, Ohio

102 W. 2nd St.
Room 1315
Dayton 3, Ohio

Hyde Sales Co.
1341 Cherokee St.
Denver 4, Colo.

2220 Utah St. N.E.
Albuquerque, New Mexico

Harvey Rasmussen
2620—45th Ave.
Moline, Illinois

Marbel Assoc.
1016 1 St. Ave. South
Seattle, Washington

Entis Assoc.
11 Babcock St.
Brookline 46, Mass.

Dunham Smith Electronics
11008 So. Downey Ave.
Downey, Calif.
Phone Topaz 97215

For more information circle **294** on inquiry card.

SMOKE INDICATORS AND RECORDERS

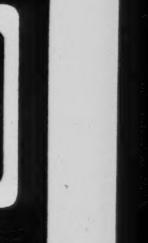
BAILEY METERS

BAILEY SMOKE DENSITY RECORDER (Bolometer Type)

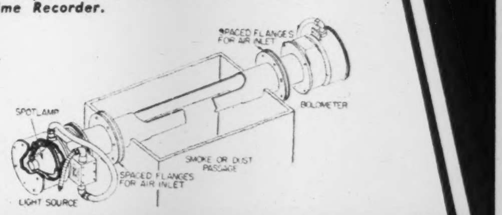
May also be used to indicate Dust Density or Particle Concentration. The Bailey Smoke Density Recorder quickly reveals inefficient operating conditions and provides 24-hour continuous records. A Bailey Running Time Recorder may be included in the same case to record elapsed time of excessive smoke condition.

Both light source and Bolometer are of sealed beam construction to assure long, accurate life. This unique smoke detector is not affected by high ambient temperatures or corrosive gases. It needs no cooling devices.

Request Product Specification E66-1 for Smoke Density Recorder and Product Specification E12-5 for Running Time Recorder.



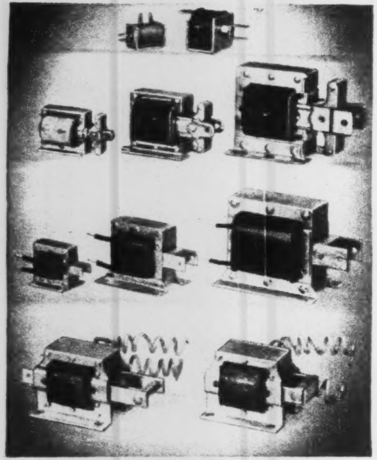
Smoke Density Recorder



BAILEY METER COMPANY

1041 IVANHOE ROAD · CLEVELAND 10, OHIO

For more information circle **295** on inquiry card.



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CUSTOM
QUALITY
STOCK
SOLENOIDS

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Available for Immediate Delivery

Seventeen models provide 34 widely differing specifications . . . delivery within 24 hours.

Specifications include: pull and/or push capacities up to 45 lbs. . . . sizes from ¾" x 1⅛" to 3" x 3" . . . stroke lengths fractional to 2".

Double shading coils provide high sealed pull without excessive AC hum. Electrical characteristics are thoroughly uniform. Units are compactly engineered to extremely close tolerances.

Solenoids can be supplied in any quantity from single units to long-run cost-saving production orders.

Request complete information and catalog.

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FACTORIES IN CHICAGO AND KENTLAND, INDIANA
3438 MILWAUKEE AVENUE • CHICAGO 41, ILLINOIS

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Cinch Mfg. Co.
Circon Component Co.
Cleveland Metal Specs
Dialight Corp.
Elco Corp.
Garde Mfg. Co.
Graphik Circuits Div.
Indust. Hrdw. Mfg. Co.
Lerco Electronics
Mycalex Corp. of Amer.
Newark Electric Co
Signal Indicator Corp.
Sylvania Elect. Prods.
Waldom Electronics
Winchester Electronics

SOCKETS, Thermometer, see Thermowells

SOCKETS, Transistor

AMP, Inc.
Alden Products
Ampco Mfg. Co.
Atlas E-E Corp.
Cinch Mfg. Co.
Circon Component Co.
Elco Corp.
Felts Corp.
Indust. Hrdw. Mfg. Co
Mycalex Corp. of Amer.
Newark Electric Co.
Sylvania Elect. Prods.
Techron, Inc.
Waldom Electronics

SOCKETS, Tube

Alden Products
Amphenol Electronics
Autom. Electric Co.
Birnbach Radio Co.
Centralab Div.
Cinch Mfg. Co.
Corning Glass
DuMont Labs., Allen B.
Eitel-McCullough
Elco Corp.
Electronic Mechanics, Inc.
Indust. Hrdw. Mfg. Co.
Insuline Corp. of Amer.
Johnson Co., E. F
Millen Mfg. Co.
Mycalex Corp. of Amer.
National Co.
National Tel-Tronics
Newark Electric Co.
Raypar, Inc.
Remler Co.
Sylvania Elect. Prods
U. S. Gasket Co.
Vector Electronic Co.
Waldom Electronics
Winchester Electronics

SOCKETS, Turret

Alden Products
Cinch Mfg. Co.
Elco Corp.
Sylvania Elect. Prods.
Vector Electronic Co.

SOFTNESS TESTERS

Bush Assoc., G. F.
Custom Scientific Insts
Dillon & Co.
Ferner Co.
Gurley, W. & L. E.
Hackes & Co., W. J.
Humboldt Mfg. Co.
Olsen Testing Mach.
Permutit Co.
Precision Scientific
Riehle Div.
Taber Instrument Co.
Testing Machines, Inc
Thwing-Albert
Universal Aviation

SOIL CABLES, see Heating Elements

SOIL TESTERS

Amer. Instr. Co.
Anton Electronic Labs
Associated Research
Humboldt Mfg. Co.
Industrial Insts., Inc.
Kauffman-Lattimer
LaMotte Chem. Prods. Co.
La Pine & Co., A. S.
Marconi Instruments
Miller, M. C.
Minn-Honeywell, Boston
Pacific Transducers
Precision Scientific
Reynolds Electric
Ruttco Mfg. Co.
Soiltest, Inc.
U. S. Testing Co., Inc

SOLAR BATTERIES, see Batteries, Solar

SOLAR PROJECTING SCREENS, see Screens, Solar Projecting

SOLDERING IRON HOLDERS

Hexacon Electric
Luma Elect. Equip.
Newark Electric Co
Newman Co., M. M
Wilder Mfg. Co.

SOLDERING GUNS and IRONS

Amer. Electcl. Heater
Brit. Electronic Sales
Contact, Inc.
Dixon, Inc., William
Elect. Soldering Iron Co
Fusion Engrg. Co.
GE, Apparatus Sales
Gulton Industries
Hexacon Electrical Co
Hubbell Metals, Inc.
Ideal Industries
Jadow Inc., B.
Kelnor Mfg. Co.
Kwikheat Mfg. Co.
Linde Co.
Mitchell Industries, Inc.
Modern Tech. Supply
Newage International
Newall Mfg. Co.
Newark Electric Co
Newman Co., M. M
Oryx Co.
Selas Corp. of Amer
Stanley Works
Ungar Elect. Tools
Weller Electric

SOLDERS, Gold and/or Silver

Allen Co., L. B.
Alpha Metals
Amer. Platinum Works
Amer. Silver Co.
Baker & Co., Inc.
Belmont Smelting
Chase Brass & Copper
Diamond Instr. Co.
Disston & Sons, Inc.
Division Lead Co.
Dixon, Inc., William
Federated Metals Div
Fusion Engrg. Co.
Gallien, R. P.
Gardiner Metal Co
GE
General Plate Div.
Handy & Harman
Hubbell Metals
Jadow Inc., B.
Kelnor Mfg. Co.
Krembs & Co.
Modern Tech. Supply
NYT Electronics
Newall Mfg. Co.
Ney Co., J. M.
Secon Metal Corp.
Sherman & Co.
Sickles & Sons
Wilson Co., H. A.

SOLDERS, Hard

Allen Co., L. B.
Alpha Metals
Aluminum Co. of Amer.
Amer. Platinum Works
Amer. Silver Co.
Baker & Co.
Belmont Smelt. & Ref.
Brit. Industries
Chase Brass & Copper
Diamond Instr. Co.
Dixon, Inc., William
Federated Metals Div.
Fusion Engrg. Co.
Gardiner Metal Co.
Gallien, R. P.
General Plate Div.
Handy & Harman
Hubbell Metals
Jadow Inc., B.
Krembs Co.
Modern Tech. Supply
Newall Mfg. Co
Ney Co.
Sherman & Co
Sickles & Sons

SOLDERS, Soft

Allen Co., L. B.
Alpha Metals
Aluminum Co. of Amer
Amer. Platinum Works
Amer. Silver Co.
Belmont Smelt. & Ref.
Chase Brass & Copper
Cerro de Pasco Corp.
Diamond Instr. Co.
Division Lead Co
Dixon, Inc., William
Federated Metals Div
Fusion Engrg. Co.
Gallien, R. P.
Gardiner Metal Co
GE
Hi Grade Alloy Corp
Hubbell Metals
Jadow Inc., B.
Johnson Engrg. Co.
Johnson Gas Appliance
Kester Solder Co.
Mico Instruments
Modern Tech. Supply
Newall Mfg. Co
Parker Appliance Co

SOLDERS, Special, including Flux-filled

Allen Co., L. B.
Alpha Metals
Amer. Brass Co
Amer. Platinum Works
Amer. Silver Co.
Amer. Solder & Flux
Baker & Co.
Belmont Smelt. & Ref.
Brit. Industries Corp
Cerro de Pasco Corp.
Chemalloy Electronics
Diamond Instr. Co.
Division Lead Co.
Dixon, Inc., William
Federal Screw
Federated Metals Div
Fusion Engrg. Co
Gallien, R. P.
Gardiner Metal Co
GE
General Plate Div.
Hi-Grade Alloy Corp.
Jadow Inc., B.
Johnson Engrg. Co.
Kester Solder Co.
Krembs Co.
L. & R. Mfg. Co
Mico Instr. Co.
Microcircuits, Co
Modern Tech. Supply
Newall Mfg. Co.
Newark Electric Co
Ney Co., J. M.
Owens-Illinois
Secon Metal Corp
Sherman & Co.

SOLENOIDS (see also Relays)

Aero Supply Mfg. Co
Aircraft Transformer
Allard Instr. Corp.
Allen-Bradley
Automatic Electric
Automatic Elec. Sales
Autom. Switch
Baso, Inc
Bunnell & Co., J. H.
B-W Controller
Cannon Elect. Devel
Carruthers & Fernandez
Cerro de Pasco Corp.
Comar Electric
Controls Co. of Amer
Cooper Co., Clark
Corbett Science Labs
Cunningham, James
Cutler-Hammer, Inc.
Dalmotor Co.
Daystrom Instr. Div.
Detroit Coil Co
Dittmore & Freimuth
Dormeyer Industries
DuMont Labs., Inc., Allen
Electra Mfg. Co.
Electrical Windings
Electro-Mechanical Dev. Co
Electro-Tech Equip.
Electro Units Supp. Co.
Electronic Spec. Co
GE, Apparatus Sales
GE Gen. Purp. Contr.
General Controls Co
General Winding Co.
Guardian Elect. Mfg. Co.
Hays Mfg. Co.
Henschel Corp.
Hillburn Electronic Prods
Houlihan Co.
Huggins Labs
Induction Motors Corp.
Kahn & Co.
Knopp, Inc.
Leach Relay Co.
Lee Spring Co.
Leland, Inc., G. H.
Magnavox Co.
Magnecon
Menlo Park Engrg
Natl. Aircraft Corp.
New York Transformer
Newark Electric Co
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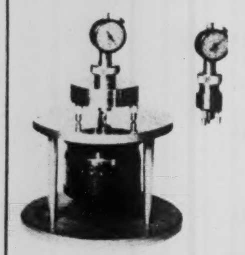

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SPRINGS, Flat

Allied Products Div.
All-Weather Springs
Amer. Laubscher
Associated Spring Corp.
Automatic Electric
Beryllium Corp.
Chatillon & Sons
Cleveland Wire Spring
Crucible Steel
Elgin Nat'l. Watch Co
Fischer Spring Co.
Grammes & Sons
Hairspring Vibrating
Hamilton Watch Co
Hunter Spring Co.
Illinois Coil Spring
Instr. Specialties Co.
Leetronics, Inc
Lewis Spring & Mfg. Co
Mallory & Co., P. R.
Manross & Sons, Div.
New Haven Clock
Peck Spring Co.
Precision Products
Rapidan Mfg. Co.
Sandsteel Spring Div.
Staver Co., Inc.
Stimpson Co.
Swiss Amer. Jewel-Bear
Sylvania Elect. Prods.
Tinnerman Products
Vallorbs Jewel Co.
Watch-Motor Mainspring
Wheaton Co.

SPRINGS, Hair and Hair Spring Assemblies

Alina Corp.
Allied Products Div.
Amer. Laubscher Corp.
Asam Mfg. Co.
Associated Spring Corp
Chatillon & Sons
Elgin Nat'l. Watch, Abras
Fischer Spring Co.
Hamilton Watch Co
Hairspring Vibrating
Howard Clock
Ingersoll-Waterbury
Jadow, Inc.
Jensen Tool Co.
Keller & Co., L. H.
Manross & Sons Div.
Modern Tech. Supply
Newall Mfg. Co.
New Haven Clock
Peck Spring Co.
Prec. Prod. of Waltham
Preco Co.
Sandsteel Spring Div.
Seegers Mfg.
Steel Co., Herman D.
Sylvania Elect. Prods.
Thomaston Tool & Die Co
Vallorbs Jewel Co.

SPRINGS, Helical

All-Weather Springs
Art Wire & Stamping Co.
Associated Spring Corp.
Beryllium Corp.
Chatillon & Sons
Cleveland Wire Spring
Crucible Steel
Eaton Mfg. Co.
Eisler Electric
Elgin Nat'l. Watch, Abras
Fischer Spring Co.
General Plate Div.
Houston Technical Lab.
Hunter Spring Co.
Illinois Coil Spring
Instr. Specialties Co.
Leetronics, Inc.
Lewis Spring & Mfg. Co.
Manross & Sons Div.
Peck Spring Co.
Prec. Products Co.
Preco Co.
Vallorbs Jewel Co.
Wheaton Co.

SPRINGS, Glass

All-Weather Springs
Corning Glass
Fish-Schurman
Fredericks, George E.
Houston, Technical Lab.
Peck Spring Co.
Porter, George K., Inc.
Prec. Glass Prods. Co

"PRECISION-GAUGED"
HAIRSPRINGS

More than 25 years' experience
making all types of hairsprings
for critical instrument applications.
High volume production with absolute uniformity

PRECISION PRODUCTS COMPANY INC
OF WALTHAM
WALTHAM 54, MASSACHUSETTS

For more information circle **299** on inquiry card.

Let SANDVIK
Help Specify Or
Develop The
POWER
SPRING
You Need

Use Sandvik's over 30 years of spring experience to help you get the spring that fits your application in both performance and cost. Listed are some of the applications now using Sandvik spiral springs and Sandvik's unique crosscurved springs. Let Sandvik's fund of knowledge, tooling and lab facilities help on your application. Write, wire or phone, today.

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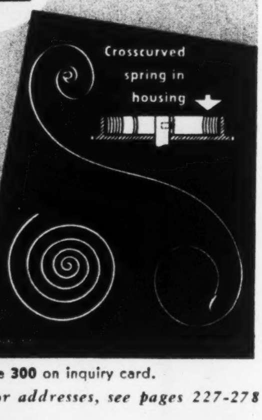


SANDVIK STEEL, INC.
SANDSTEEL SPRING
DIVISION
Fair Lawn, N. J.
SWarthmore 7-6200
In N. Y. C. ALgonquin 5-2200

For more information circle **300** on inquiry card.

SPRINGS, Torsion

Accurate Spring Mfg.
All-Weather Springs
Associated Spring Corp.
Chatillon & Sons
Cleveland Wire Spring
Crucible Steel
Elgin Nat'l. Watch, Abra.
Fischer Spring Co.
Goodrich Co., B. F.
Humphrey, Inc.
Hunter Spring Co.
Illinois Coil Spring
Instrument Specialties
Leetronics, Inc.
Lewis Spring & Mfg. Co.
Manross & Sons Div.
Peck Spring Co.
Prec. Prods. of Watham
Thomaston Tool & Die Co.
Wheaton Co.

SPRINGS, Watch

Allied Products Div.
Associated Spring Corp.
Elgin Nat'l. Watch, Abra.
Hairspring Vibrating
Hamilton Watch Co.
Iadow Inc., B.
Kastner, Charles
Manross & Sons Div.
Marshall Co., C. & E.
Modern Tech. Supply
Newall Mfg. Co.
New Britain Spring
New Haven Clock
Precision Products Co.
Preco Co.
Sandsteel Spring Div.
Sickles & Sons
Steel Co., Herman D.
Thomaston Tool & Die Co.
Wakmann Watch Co.
Watch-Motor Mainspring

SQUARE WAVE GENERATORS, see Generators

STAMPINGS, Fibre and Laminated Phenolic

Aerolite Electronics
Aero Supply Mfg. Co.
Allied Engraving
Auburn Mfg. Co.
Biggs Co., Carl H.
Cambridge Thermionic
Continental-Diamond Fibre
Dittmore & Freimuth
Dynakon Corp.
Eby, Inc., Hugh H.
Electro Devices Inc.
Erie Resistor
Federal Screw Prods.
Federal Tools
Felt Products Mfg.
Formica Co.
GE
Geophysical Instr. Co.
Grammes & Sons, Inc.
Indust. Hrdw. Mfg. Co.
Instrument Tool & Engrg.
Insulation Mfrs. Corp.
Kulka Elect. Mfg. Co.
Mayer Co., Geo. J.
Mica Insulator
Miller Dial & Name Pl.
Moss & Co., Henry
National Tel-Tronics
Printloid, Inc.
Rapidan Mfg. Co.
Reisner Mfg. Co.
Richardson Co.
Rogan Bros.
Spaulding Fibre Co.
Stafford Co.
Staver Co., Inc.
Switchcraft, Inc.
Synthane Corp.
Tungsten Contact Mfg.
Whitehead Stamping
Wilmington Fibre

STAMPS, Kovar

Fed. Telephone & Radio
Federal Tools
Hermaseal Co.
Hermetic Sealed Prods.
Hunter Spring Co.
Instrument Tool & Engrg.
Richfield Coined Prods.
Staver Co., Inc.
Stupakoff Div.
Sylvania Elect. Prods.

STANDARD CELLS

Amer. Instr. Co.
Amer. Mach. & Foundry
Arnholt Ceramics
Cambridge Instr. Co.
Central Scientific
Electronic Measurements
Epply Lab.
GE
Gray Instr. Co.
Hastings-Raydist
Leeds & Northrup
Minneapolis-Honeywell
  Rubicon Instrs.
Muirhead Instrument
Phoenix Prec. Instr.
Sensitive Res. Instr.
Thwing-Albert
Weston Instrs.

STANDARDS, Acoustic

Chesapeake Instr. Corp.
Dyna Empire, Inc.
General Radio Co.
MassaDiv. of Cohu
Western Electro-Acoustic

STANDARDS, Capacitance

Aerovox Corp.
Boonton Electronics
Brown Electro-Measmt.
Cambridge Instr. Co.
Electro-Measurements
Federal Telephone & Radio
General Radio Co.
Industrial Instruments
Julie Res. Labs
Leeds & Northrup
MacLeod & Hanopol
Minneapolis-Honeywell
  Rubicon Instrs.
Muirhead Instrument
Pacific Instruments
Scientific Specialties
Shallcross Mfg. Co.
Simmonds Aerocessories
Solar Mfg. Corp.
United Condenser

STANDARDS, Color

Esco Products
Fish-Schurman
Gardner Lab.
Hellige, Inc.
Hickok Elec. Instr.
Koehler Instr. Co.
LaMotte Chem. Prod.
Munsell Color Co.
Phoenix Prec. Instr.
Prec. Glass Prods. Co.
Tarc Electronics Inc.
Taylor & Co., W. A.
Weston Instrs.

STANDARDS, Emf, see Standard Cells

STANDARDS, Frequency (see also Forks, Tuning)

ARF Products
Aero Instrument
Amer. Instr. Co.
Amer. Time Prods.
Berkeley Div.
Bliley Electric
Boonton Radio Corp.
Browning Labs.
Central Scientific
Collins Radio Co.
Columbus Products
Crystal Research Labs.
D & R Ltd.
De Mornay-Bonardi
Doolittle Radio
Dynapar Corp.
Electronic Devel. Lab.
Erie Instrumentation
Espey Mfg.
Federal Telephone & Radio
Feiler Engrg. Co.
Ferris Instr. Co.
Freed Transformer
GE, Apparatus Sales
GE, Telechron Dept.
General Radio Co.
Geotechnical Corp.
Gertsch Products
Hamilton Watch
Hathaway Instr. Co.
Hewlett-Packard
Hickok Electcl. Instr.
Howell Instr. Co.
Hycon Eastern
Indust. Test Equipt.
Inst. Corp. of Fla.
Kearfott Co.
Kinetic Instr. Co.
Knights Co.
Lavoie Labs.
Lampkin Labs
MacLeod & Hanopol
Manson Labs.
Marconi Instruments
Maxson Instr. Div.
Measurements Corp.
Millen Mfg. Co.
Narda Corp.
National Co.
New London Instr. Co.
Panoramic Radio Prods.
Philamon Labs.
Polytechnic Res. & Devel.
Potter Instr. Co.
RCA Div.
Radioactive Prods., Inc.
Radio City Prods.
Radio Frequency Labs
Riverbank Labs
Servo Corp. of Amer.
Sherron Metallic
Slaughter Co.
Standard Elect. Time
Std. Electronic Res.
Stewart Instr. Co.
Sunshine Scientific
Systron Corp.
Teletronics Lab., Inc.
Times Facsimile Corp.
Transistor Devices
Varo Mfg. Co.
Vectron, Inc.
Walkirt Co.
Westport Electric

STANDARDS, Gamma-Ray, see Standards, Radioactivity

STANDARDS, Inductance

Aerovox Corp.
Boonton Radio Corp.
Cambridge Instr. Co.
Communication Access.
Dietz Design & Mfg.
Electro-Measurements
Freed Transformer
General Radio Co.
Leeds & Northrup
Minneapolis-Honeywell
  Rubicon Instrs.
Pacific Instr. Co.
Scherr Co., Inc.
Shallcross Mfg. Co.
Teletronics Lab.
United Transformer Corp.

STANDARDS, Length

Acme Industrial
Brown & Sharpe
Engis Equipt. Co.
Gaertner Scientific
Griswold Mfg. Co.
Gurley, W. & L. E.
Pratt & Whitney
Renick Co., L. C.
Scherr Co., Inc.
Sheffield Corp.
Size Control Co.
Starrett Co.
Swedish Gage
Van Keuren Co.
Webber Gage

STANDARDS, Mass

Gurley, W. & L. E.
Seederer-Kohlbusch

STANDARDS, Pressure

Coleman Instr. Co.
Consol. Electrodynamics
Dynametrics Corp.
Green, Henry J.
Ideal Aerosmith
Meriam Instr. Co.
Minneapolis-Honeywell
  Boston Div.
Morehouse Machine Co.
Prec. Thermom. & Insts.
Ruska Instr. Corp.
Scientific Instr. Co.
Wallace & Tiernan
Weksler Thermometer

STANDARDS, Radioactivity

Alpine Labs. Ltd.
Anton Electronic Labs
Atomic Instr. Co.
Bio-Rad Labs.
Can. Radium & Uranium
El-Tronics, Inc.
Jordan Electronics
Landsverk Electrometer
Menlo Res. Lab.
Nuclear-Chicago
Nuclear Measmts. Corp.
Nucleonic Corp. of Amer.
Pacific Transducer
Technical Associates
Tracerlab
Universal Atomics
U. S. Radium Corp.
Western Radiation

STANDARDS, Resistance

Acton Labs.
Aerovox Corp.
Arnhold Ceramics
Associated Research
Beck Bros.
Cambridge Instr. Co.
Cutler-Hammer
Daven Co.
Eastern Prec. Resistor
Electro-Measurements
Electro-Mec Lab.
Federal Instr. Co.
Federal Telephone & Radio
General Radio Co.
Gray Instr. Co.
Julie Res. Labs.
Leeds & Northrup
Minneapolis-Honeywell
  Rubicon Instrs.
Physics Res. Labs.
Pimex, Inc.
Sensitive Res. Instr.
Shallcross Mfg. Co.
Tech Labs., Inc.

STANDARDS, Shunt

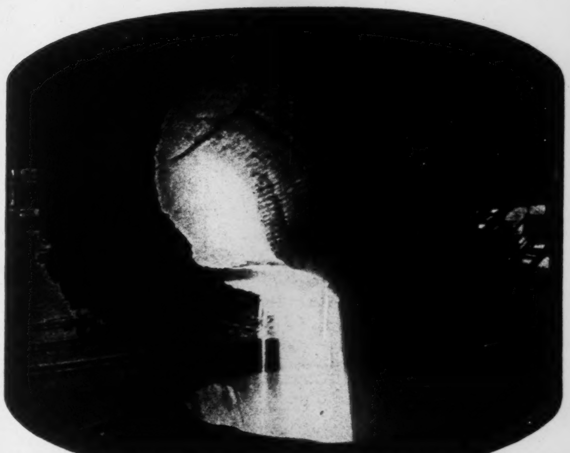
Associated Research
Burlington Instr. Co.
Cambridge Instr. Co.
Davenport Mfg.
DeJur-Amsco
Electronic Devel. Lab.
GE
Gray Instr. Co.
Hickok Electcl. Instr.
Instrument Resistors Co.
Internat. Resistance
Leeds & Northup
Lewis Engrg. Co.
Minneapolis-Honeywell
  Rubicon Instrs.
Physics Research
Roller-Smith
Sensitive Res. Instr.
Shallcross Mfg.
Sittler Corp.
Triplett Electcl. Instr.
United Optical
Westinghouse Electric
Weston Instrs.
Winslow Co.

STANDARDS, Sound Level

Audio Instrument Co.
Daven Co.
Dyna Labs.
General Radio
Kay Electric
Massa Div. of Cohu
Western Electro-Acoustic

STANDARDS, Surface Roughness and/or Finish

Acme Industrial Co.
Baird-Atomic
Blake Co., Edward
Brush Instrs.
Bushnell Co., D. P.
Compar Instr. Co.
DoAll Co.
Engis Equipt. Co.
Gar Prec. Parts, Inc.
GE, Apparatus Sales
Link Engrg. & Mfg.
Micrometrical Mfg.
Opplem Co.
Palos Optical Co.
Penn Optical & Instr.
Scherr Co., Inc.
Size Control Co.
Surface Checking Gage
Webber Gage
Ziess, Inc., Carl



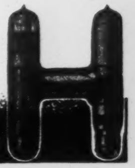
ACCURACY OF TEMPERATURE CONTROL DETERMINES ITS QUALITY

ACCURATE control of temperature or pH is vital to modern heat treating or chemical processing, because only in this way can uniform quality be obtained under mass production conditions.

Potentiometers have made such control possible, and "the heart" of these instruments in most cases, for over 25 years, has been the Eplab Standard Cell. This cell is a "yardstick" for the translation of voltage to temperature. The first commercial cell of its type, constant research has made it "as standard as sterling".

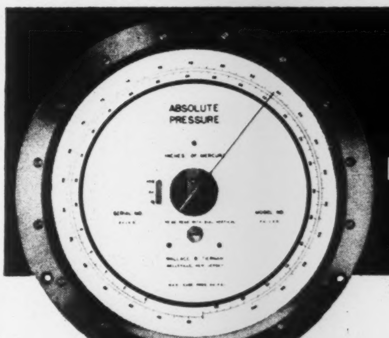
When you buy potentiometers, specify Eplab Standard Cells.

THE EPPLEY LABORATORY, INC.
SCIENTIFIC INSTRUMENTS
3 Sheffield Ave., Newport, R.I., U.S.A.



EPLAB Standard Cells For Potentiometric Instruments As Standard as Sterling

For more information circle **301** on inquiry card.



W&T
PRECISION
ANEROID
MANOMETER
FA-129

THE CALIBRATING STANDARD
...For Absolute Pressure Work

Ranges: 0-31.5 inches thru 0-100 inches of Hg. absolute in five ranges— 45 inch scale in two revolutions.
Accuracy: 1/1000 of full scale
Sensitivity: 1/10,000 in *all* ranges

Write for Publication No. A-114.48-A

WALLACE & TIERNAN
INCORPORATED
25 MAIN ST., BELLEVILLE 9, N. J.
In Canada: Wallace & Tiernan, Ltd., Toronto

A 114

For more information circle **302** on inquiry card.

FREQUENCY STANDARDS

*3⅛" high
400 - 1000 cy.

PRECISION FORK UNIT
TYPE 50

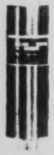
Size 1" dia. x 3¾" H. Wght., 4 oz.*

Frequencies: 240 to 1000 cycles
Accuracies:—
  Type 50 (±.02% at —65° to 85°C)
  Type R50 (±.002% at 15° to 35°C)
Double triode and 5 pigtail parts required
Input, Tube heater voltage and B voltage
Output, approx. 5V into 200,000 ohms

FREQUENCY STANDARD
TYPE 50L

Size 3¾" x 4½" x 5½" High
Weight, 2 lbs.

Frequencies: 50, 60, 75 or 100 cycles
Accuracies:—
  Type 50L (±.02% at —65° to 85°C)
  Type R50L (±.002% at 15° to 35°C)
Output, 3V into 200,000 ohms
Input, 150 to 300V, B (6V at .6 amps.)



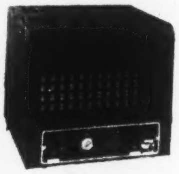
*3½" high
400 to 500 cy.
optional

PRECISION FORK UNIT
TYPE 2003

Size 1½" dia. x 4½" H. Wght. 8 oz.*

Frequencies: 200 to 4000 cycles
Accuracies:—
  Type 2003 (±.02% at —65° to 85°C)
  Type R2003 (±.002% at 15° to 35°C)
  Type W2003 (±.005% at —65° to 85°C)
Double triode and 5 pigtail parts required
Input and output same as Type 50, above

FREQUENCY STANDARD
TYPE 2005



Size, 8" x 8" x 7¼" High
Weight, 14 lbs.

Frequencies: 50 to 400 cycles
(Specify)
Accuracy: ±.001% from 20° to 30°C
Output, 10 Watts at 115 Volts
Input, 115V. (50 to 400 cycles)

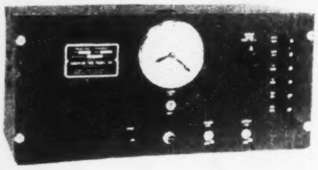
FREQUENCY STANDARD
TYPE 2007-6

NEW

TRANSISTORIZED, Silicon Type
Size 1½" dia. x 3½" H. Wght. 7 ozs.

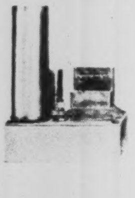
Frequencies: 400 — 500 or 1000 cycles
Accuracies:
  2007-6 (± .02% at —50° to +85°C)
  R2007-6 (±.002% at +15° to +35°C)
  W2007-6 (±.005% at —65° to +125°C)
Input: 10 to 30 Volts, D. C., at 6 ma.
Output: Multitap, 75 to 100,000 ohms

FREQUENCY STANDARD
TYPE 2121A



Size
8¾" x 19" panel
Weight, 25 lbs.

Output: 115V
60 cycles, 10 Watt
Accuracy:
±.001% from 20° to 30°C
Input, 115V (50 to 400 cycles)



FREQUENCY STANDARD
TYPE 2001-2

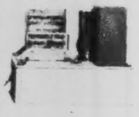
Size 3¾" x 4½" x 6" H., Wght. 26 oz.

Frequencies: 200 to 3000 cycles
Accuracy: ±.001% at 20° to 30°C
Output: 5V. at 250,000 ohms
Input: Heater voltage, 6.3 - 12 - 28
B voltage, 100 to 300 V., at 5 to 10 ma.

FREQUENCY STANDARD
TYPE 2111C

Size, with cover
10" x 17" x 9" H.
Panel model
10" x 19" x 8¾" H.
Weight, 25 lbs.

Frequencies: 50 to 1000 cycles
Accuracy: (±.002% at 15° to 35°C)
Output: 115V, 75W. Input: 115V, 50 to 75 cycles.



ACCESSORY UNITS
for TYPE 2001-2

L —For low frequencies
  multi-vibrator type, 40-200 cy.
D —For low frequencies
  counter type, 40-200 cy.
H —For high freqs, up to 20 KC.
M —Power Amplifier, 2W output.
P —Power supply.

This organization makes frequency standards within a range of 30 to 30,000 cycles. They are used extensively by aviation, industry, government departments, armed forces—where maximum accuracy and durability are required.

WHEN REQUESTING INFORMATION
PLEASE SPECIFY TYPE NUMBER

American Time Products, Inc.

Watch Master
Timing Systems

Telephone: PLaza 7-1430

580 Fifth Ave., New York 36, N. Y.

For more information circle **303** on inquiry card.

STANDARDS, Temperature

Barnes Engrg. Co
Ever Ready Thermometer
Green, Henry J.
H B Instrument
Harco Laboratories
Leeds & Northrup
Lewis Engrg.
Moeller Instr. Co
Palmer Thermometers
Precision Therm.
Pyro Electric
Revere Co
Scientific Instr. Co
Servo Corp of Amer.
Teichert Engrg. Co
Trerice Co., H. O.
Victory Engrg. Co
Weksler Thermom. Corp.
Weston Electcl. Instr.

STANDARDS, Time

Amer. Instr. Co
Amer. Time Prods.
Berkeley Div.
Dynapar Corp.
Erie Instrumentation
Federal Telephone & Radio
Gaertner Scientific
General Radio Co
Geotechnical Corp
Hamilton Watch
Lavoie Labs
Moeller Instr. Co
National Co
Parsons Co., Ralph M.
Potter Instrument
Riverbank Labs
Rutherford Electronics
Standard Elect. Time Co
Std. Electronic Res.
Stewart Instr. Co
Stoelting Co
Systron Corp
Varo Mfg. Co.
Vectron, Inc

STANDARDS, Volume

Gurley, W. & L. E.
Kontes Glass
Roska Instr. Corp

STARTERS, Motor

Allen-Bradley
American Kleckner
B W Controller Co
Bendix Aviation Corp
Clark Controller Co
Cutler-Hammer
Cyclohm Div.
Essex Wire Corp
Furnas Electric
GE, Apparatus Sales
Gates Electronic Co
Ingersoll-Rand
Minneapolis-Honeywell
Monitor Controller Co
Perkin Engrg. Co
Raytheon Mfg. Co
Schauer Mfg. Co.
Small Motors, Inc
Square D Co.
Synchro-Start
Westinghouse Electric

STATIC ELECTRICITY GENERATORS

Edmund Scientific Co
Electric Regulator Corp
Hewson Co.

STATIC ELIMINATORS

C. G. S. Labs
Can. Rad. & Uranium
Hewson Co., Inc
Hoover Electronics Co
Nuclear Corp. of Amer.
Optics Mfg. Corp
Robins Industrial Corp
Sela Electronics Co.
Sticht Co., Herman H
Superex Electronics
Taller & Cooper
Transval Engrg. Corp
U. S. Radium Corp.

STATION CONTROL EQUIPMENT, see Electric Power Generation Instruments, also Gas Distribution System Instruments

STEAM GOVERNORS, see Boiler Room Instruments

STEAM METERS, see Flowmeters, Inferential Type

STEAM SPECIALTIES, see Boiler Room Instruments

STEEL TAPES, see Tapes, Steel

STELLAR SPECTROSCOPES, see Spectroscopes, Stellar

STEREOSCOPES

Abrams Instr. Co.
Amer. Optical
Avion Div.
Bronoptics Co
DoAll Co
Edmund Scientific
Ercona Corp.
Fairchild, Reconnaissance
General Biological
Gordon Enterprises
Hacker & Co., W. J.
Meyer Opticraft
Opplem Co.
Opto-Metric Tools
QOS Corp.
Stratex Instr. Co
Wild Heerbrugg
Zeiss, Inc., Carl

STEREOSCOPES, X-ray

Abrams Instr. Co
Bar-Ray Products
Bausch & Lomb
Fairchild Reconnaissance
GE, X-Ray Dept.
Gordon Enterprises
Kelley-Koett Mfg. Co
North Amer. Philips
Picker X-Ray
Tracerlab, Inc
Westinghouse X-Ray Co

STETHOSCOPES, Engineers

Anco Instr. Div.
Brush Instruments
Engineers Res. & Devel
Fairchild Camera
Feiler Engrg. & Mfg. Co
Gilmore, E. R.
Western Gear Corp
Zeiss Inc., Carl

STIFFNESS TESTERS, Paper, see Paper Testing

STILLS, Water (see also Distillation)

Aetna Scientific
Andrew Techn. Supply
Barnstead Still
Central Scientific
Electric Hotpack Co
Fish-Schurman
General Scientific Equipt
Greiner, Emil
Labline, Inc.
Penfield Mfg. Co.
Precision Scientific
Stokes Mach. Co., F. J.
Selas Corp. of Amer.
Thomas Co., Arthur H
Weber Bros. Metal Works

STIRRERS, Laboratory, Variable Speed

Ace Glass
Alcoe Co., A. S.
Amer. Instr. Co.
Andrew Techn. Supply
Brookfield Engrg. Labs
Central Scientific
Chicago Surgical & Elect
Eastern Engrg. Co
Eberbach Corp
Eberbach & Son
Fish-Schurman
Fisher-Scientific
Greiner Co., Emil
Heller Co., G. K
Humboldt Mfg. Co
Kontes Glass
Koehler Instr. Co
La Pine & Co., A. S.
Labline, Inc.
Micro-Metric Instr
Mixing Equipt. Co
Omega Machine
Palo Lab. Supplies
Palo-Myres Inc.
Phipps & Bird
Precision Scientific
Research Appliance Co
Sargent & Co., E. H.
Sorvall, Inc., Ivan
Talboys Instr. Corp.
Technical Products
Temperature Engrg.
U. S. Gasket Co
Welch Mfg. Co., W. M.
Western Electric
Wilkens-Anderson
Williams Apparatus, Inc

STOP WATCHES, see Watches, Stop

STRAIGHT EDGES

Acme Industrial
Alteneder & Sons, Theo.
Amer. Measg. Instr.
Brown & Sharpe
Bruning Co., Inc.
Collins Microflat Co
Dietzgen Co
DoAll Co
Gray Instr. Co.
Griswold Mfg. Co
Hays Corp
Keuffel & Esser
Lufkin Rule Co.
Negus, T. S. & J. D.
Post Co., Frederick
Scherr Co., Inc.
Speidel & Co.
Starrett Co.
Swedish Gage
Taft-Pierce Mfg. Co
Warren-Knight
Webber Gage
Weber Co., F.
White Co., David

STRAIGHTENING VANES

Amer. Meter Co
Bailey Meter Co.
Bristol Co.
Builders-Providence
Daniel Orifice Fitting
Foxboro Co
Hays Corp.
Meriam Instr. Co
Penn Insts. Div.
Republic Flow Meters
Robinson Orifice Fitting
Simplex Valve & Meter
Taylor Instr. Cos.

STRAIN GAGES, including Bonded and Unbonded Resistance Type (see also Stress, also Polariscopes)

Acme Industrial
Allegany Instr. Co
Amer. Instr. Co.
Anderson, Arthur R
Ann Arbor Instr. Works
Bailey Meter Co.
Baldwin-Lima-Hamilton
Bendix-Pacific
Bristol Co.
Cal-Ohm Labs
Chatillon & Sons
Computer Instr. Corp.
Control Devices Inc.
DuMont Labs., Allen B
Dynamic Instr. Co
Edin Electronics
Eitzen Co., Louis C.
Ellis Associates
Endevco Corp
Federal Products Corp.
Fielden Instr. Div.
Gaydon Co
GE, Apparatus Sales
Giannini & Co.
Gilmore Industries
Greenleaf Mfg. Co.
Hamilton Watch
Hathaway Instr. Co
Hays Corp.
Heiland Div.
Industrial Electronics, Inc
Metzger & Son
Miller Corp., Wm.
Olsen Testing Machine
Phoenix Prec. Inst
Pratt & Whitney
Reed Research
Revere Corp.
Riehle Div.
Sciaky Bros., Inc
Scientific Enterprises
Sheffield Corp.
Size Control Co.
Spivey, Inc., James
Starrett Co.
Statham Instrs
Swedish Gage
Taller & Cooper, Inc
Tatnall Meas. Systems
Technograph Printed Elect
Testing Machines, Inc.
Thwing-Albert
Trans-Sonic, Inc.

STRAIN-RATE and STRESS-RATE CONTROLLERS

Amer. Electronic Mfg
Bailey Meter Co.
Barber-Colman
Berkeley Div.
Bristol Co.
Bush Assoc., G. F.
Chatillon & Sons
Fielden Instr. Div.
Gilmore Industries
Hathaway Instr. Co
Industrial Control Co.
Industrial Electronics
Phoenix Prec. Instr
Robertshaw-Fulton
Thwing-Albert

STRAIN TESTERS, Glass, see Glass Test Instruments

STRAIN-TIME RECORDERS

Allegany Instr. Co
Bailey Meter Co.
Baldwin-Lima-Hamilton
Bristol Co.
Brush Instruments
Cal-Ohm Labs
Cambridge Instr. Co.
Consol. Electrodynamics
Consolidated Avionics
Cook Electric
Ellis Associates
Fielden Instr. Div.
Foxboro Co.
Geotechnical Corp.
Gilmore Industries
Hamilton Watch Co.
Hathaway Instr. Co.
Heiland Div.
Helipot Div.
Industrial Electronics
Keuffel & Esser
Non-Linear Systems
Opplem Co
Phoenix Prec. Instr.
Radiation, Inc.
Ruge Assocs.
Telecomputing Corp.
Thwing-Albert

STRAINERS, Fabricated Wire Cloth

Air-Maze Corp.
Baker & Co
Cashco, A. W
Jordan Corp.
Keckley Co., O. C.
Newark Wire Cloth Co

STRAINERS, Pipeline

Airmatic Valve
Anderson Co., V. D.
Automatic Switch
Black, Sivalls & Bryson
Cash Co., A. W.
Cash Valve Mfg. Corp.
Cooper Co., Clark
Corning Glass Works
Davis Regulator Co.
DeZurick Shower Co
Edward Valves, Inc
Fisher Governor
General Controls
Hays Mfg. Co
Henry Valve Co.
Hoffman Specialty Mfg
Jordan Corp
Kaye & MacDonald
Keckley Co., O. C.
Kieley & Mueller
Klipfil Valves, Inc.
Leslie Co.
Marsh Corp., Jas. P.
Mason-Neilan Div.
McAlear Mfg. Co.
Mueller Co
Newark Wire Cloth Co.
Nicholson & Co., W. H
Rockwell Mfg. Co
Rockwood Sprinkler
Sarco Co.
Schade Valve Mfg. Co.
Schutte & Koerting
Smith Co., S. Morgan
Spence Engrg. Co
Squires Co., C. E.
Trerice Co.
Warren Engrg. Co
Watts Regul. Co.

STREAM GAGING INSTRUMENTS, see Hydrologic Instruments

STRESS INDICATORS

Allied Products Div.
Ames Co., B. C.
Bailey Meter Co.
Baldwin-Lima-Hamilton
Brush Instruments
Cambridge Instr. Co
Chatillon & Sons
Crescent Engrg. & Res.
Daytronic Corp.
DuMont Labs., Allen B
Ellis Associates
Emery Co., A. H.
Federal Products
GE
Geotechnical Corp
Gilmore Industries
Hathaway Instr. Co.
Heiland Div.
Industrial Electronics, Inc
Kushner, Joseph B.
Lessells & Assocs.
Magnaflux Corp.
Metzger & Son
Metron Instr. Co.
Minn-Honeywell, Boston
National Instr. Co
Owen Labs., Inc
Polyphase Instr. Co
Riehle Div
Ruge Assocs.
Shasta Div.
Statham Instrs
Swedish Gage

STRESS-STRAIN ANALYZERS

Allegany Instr. Co.
Allied Products Div
Consol. Electrodynamics
Eitzen Co., Louis C.
Electronic Control Sys
Electronic Tube Corp
Ellis Associates
Franklin Electronics
Furst Electronics
Gilmore Industries
Hathaway Instr. Co.
Moseley Co.
National Instr. Co.
Performance Measmts. Corp.
Polyphase Instr. Co.
Westronics, Inc.

STRESS-STRAIN INDICATORS and/or RECORDERS

Ace Electronics
Allegany Instr. Co.
Allied Products Div.
American Hydromath
Ames Co., B. C.
Anderson, Arthur R.
Ann Arbor Instr. Wks.
Bailey Meter Co.
Baldwin-Lima-Hamilton
Barnes Development
Beckman Instruments
Bristol Co.
Brookfield Engrg. Labs.
Brush Instruments
Cambridge Instr. Co.
Century Geophysical
Chatillon & Sons
Consolidated Avionics
Consol. Electrodynamics
Cook Electric
Crescent Engrg. & Res.
Daytronic Corp.
Dillon & Co.
Eitzen Co., Louis C.
Electro Products Labs
Electronic Tube Corp.
Ellis Associates
Emery Co., A. H.
Franklin Electronics
Furst Electronics
GE
Geotechnical Corp
Gilmore Industries
Greenleaf Mfg. Co.
Hathaway Instr. Co
Heiland Div.
Helipot Div.
Industrial Electronics
Kybernetes Corp.
Leeds & Northrup
Librascope, Burbank Div.
Magnaflux Corp.
Metron Instruments
Metzger & Son
Minn-Honeywell, Boston
Mosley, Francis L.
National Instr. Co
Non-Linear Systems
Nosker Engrg. Prods.
Offner Electronics
Olsen Testing Machines
Polyphase Instr. Co
Riehle Div.
Ruge Assocs.
Sanborn Co.
Scientific Enterprises
Scott Testers, Inc.
Sheffield Corp.
Statham Instrs
Streeter-Amet
Swedish Gage
Taller & Cooper
Task Corp
Testing Machines, Inc.
Thwing-Albert
Trimount Instr. Co

STRIP, Aluminum, see Sheets, Aluminum

STRIP, Beryllium Copper, see Sheets, Beryllium Copper

STRIP, Stainless Steel

Allegany Ludlum Steel
Amer. Silver Co.
Armco Steel Corp.
Carpenter Steel Co.
Crucible Steel of Amer.
Davenport Mfg. Co.
Disston & Sons, Inc
Driver Co., Wilbur B.
Driver-Harris
Ferner Co.
Fischer & Porter Co
Hubbell Metals
Jessop Steel Co.
Metal Goods Corp.
Michigan Steel Cast. Co
Schnitzer Alloy Prods
Simonds Saw & Steel
Universal-Cyclops

STRIP-CHART RECORDERS, see Recorders, also Object of Measurement

STROBOSCOPES

Associated Research
Berkshire Labs.
Biddle Co., Jas. G.
Boulin Instr. Co.
Bronoptics Co
Communication Meas. Lab.
Computer Co. of Amer.
Conn, Ltd., C. G
Cox Instruments
Davenport Mfg.
Dormitzer Elect. & Mfg.
Edgerton, Germeshausen
Electronic Engineers
Electronic Measmts. Co
Endevco Corp.
Engrg. Res. & Devel
Epic, Inc.
Fruengel Inc.
General Radio Co.
Hickok Elec. Instr.
Huggins Labs.
Ideal Laboratory Tool
Internat. Res. & Devel.
Kemlite Labs.
Lenox Instrument Co
Mercury Electronic Co
Minneapolis-Honeywell
Opad Electric
Slaughter Co
Sticht Co., Herman H
Sylvania Elect. Prods.
Wabash Instrs. & Spec
Welch Mfg. Co., W. M
Western Gear Corp.
Zeiss, Inc., Carl

STRUCTURAL SHAPES

American Brass Co.
Breeze Corp.
Centralab Div.
Gervos Instr. Co.
Hubbell Metals
Keystone Carbon Co.

STYLI, Agate Point

Duotone Co.
Keller, Jr., Hugo P.
King Gem Co.
Vallorbs Jewel Co.

STYLI, Sapphire, Recording

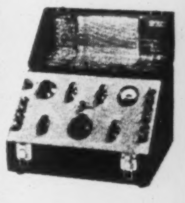
Audio Devices, Inc.
Bird & Co.
Duotone Co.
Elgin Natl. Watch
Gatti, Inc., Aurele M.
Impact Register
Keller, Jr., Hugo P.
King Gem Co.
Powers, George
Reeves Soundcraft
Steel Co., Herman D.
Swiss Jewel Co.
Vallorbs Jewel
Worley Jewel Co., John

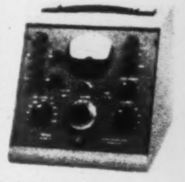
STYLI, Tungsten, Recording

Alden Systems Co.
Cleveland Tungsten Mfg.
Duotone Co.
Edin Co.
Vallorbs Jewel Co.
Willey's Carbide Tool Co.
Worley Jewel Co.

SULPHUR DIOXIDE INDICATORS, and/or RECORDERS, see Gas Analyzers

SUN COMPASSES, see Compasses, Sun





Strain Gage Instrumentation

BAM-1
Bridge Amplifier and Meter

Very convenient general purpose box. Static readings on meter. Dynamic readings on dc 'scope. Transistor dc amplifier with excellent low noise and drift. **Bulletin #6.**

BA-12
Bridge Amplifier

Accurate monitoring of fatigue tests. "Dynamic Null Balance" gives accuracy within 1% on steady dynamic signals. Used with any cathode ray oscilloscope. **Bulletin #5.**

B-1 Bridge

Bridge box for powering and calibrating all configurations of SR-4 type strain gages drives 10 millivolt sensitivity recorders such as strip chart, dial indicators and sensitive cathode ray oscilloscopes. The B-1 supplies DC to the strain gage bridge. It is powered from 115V 60 cycle line and gives stable and dependable operation from DC to 50 000 cps. **Bulletin #13.**

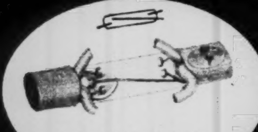
BSG-6 Switch and Balance, Bulletin #14

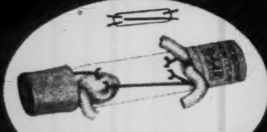
ELLIS ASSOCIATES
Box 77 Pelham, New York

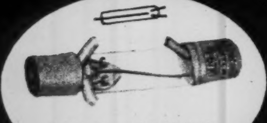
For more information circle **304** on inquiry card.

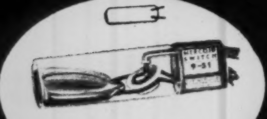
MERCOID
HERMETICALLY SEALED MERCURY SWITCHES

TILTING TYPE
AVAILABLE CIRCUITS

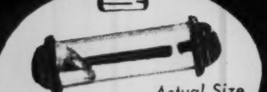

3 Wire SP-DT. 4A.-115V.


SP TO DP-DT. 4A.-115V.


Double Circuit, ST, 4A.-115V.



SP-ST. 10A. 115V.
SP-ST. 25A.-115V.


Actual Size
SPST 1.75 amp. 115 volts
metallic-end caps

Many standard Mercoid switches are available write for Bulletin -54

THE MERCOID CORPORATION
4201 BELMONT AVE., CHICAGO 41, ILL.

For more information circle 305 on inquiry card.

SUNSHINE INDICATORS and/or RECORDERS
Bendix-Friez
Bristol Co.
Cambridge Instr. Co
Friez Instr. Div.
GE
G. M. Mfg. Co., Inc
Instruments Corp.
Leeds & Northrup
Taylor Instr. Co.
Virginia Electronics
White Co., Inc.

SUPERVISORY CONTROL EQUIPMENT and SYSTEMS. see Control Systems, also Telemetering

SUPPORTS. Cable and Tubing, see Tubing Supports

SURFACE FINISH INSTRUMENTS. see Dimensional Gages, Surface

SURFACE FINISH SPECIMENS. see Standards, Surface Finish

SURFACE INDICATORS. see Dimensional Gages, Surface

SURFACE PLATES. Glass
Acme Scientific
Bausch & Lomb
Binswanger & Co
Bronoptics Co.
Cal-Astro Optical Labs
Clark & Sons
Collins Microflat Co.
Davidson Mfg.
DoAll Co.
E & W Optical
Esco Products
Fecker, Inc.
Fish-Schurman
Georator Corp.
Gordon Enterprises
Jones Optical Works
Lab. Optical Co.
Leroy M. E. Clausing
Palos Optical
Regal Instr. Co.
Scherr Co., Inc.
Tinsley Laboratories
Unertl Optical
Zeiss, Inc., Carl
Zenith Optical Lab

SURFACE PLATES. Stone
Brown & Sharpe
Bryant Chucking Grinder
Collins Microflat Co
DoAll Co.
E & W Optical
Mayne Products
Scherr Co., Inc.
Size Control Co
Taft-Pierce

SURFACE TEMPERATURE INSTRUMENTS. see Thermometers, Surface

SURFACE TENSION INSTRUMENTS (see also Balances)
Cambridge Instr. Co.
Central Scientific
Chatillon & Sons
Curtiss-Wright
Kushner Labs., Joseph K
Natl. Instr. Labs.
Thomas Co., Arthur H

SURVEY FOOT-ODOMETERS. see Odometers

SURVEYING INSTRUMENTS. including Aneroid Type
Abrams Instr. Co.
Ainsworth & Sons
Alpha Instr. Co.
Amer. Paulin System
Askania-Werke A. G.
Beckman Div.
Berger Scient. Supps.
Berger & Sons
Branson Instr. Co.
Bliss & Co.
Bostrom-Brady
Bray Optical
Brunning Co., Inc
Brunson Instr.
Dietzgen Co.
Engis Equipt. Co.
Ercona Corp.
Ferner Co., Inc.
Garlynn Engrg. Co.
Geier & Bluhm
Goldak Co.
Gordon Enterprises
Graf-Apsco
Gurley, W. & L. E.
Hastings-Raydist
Hyde Instr. Co
Jarrel-Ash
Kenyon Instr. Co.
Keuffel & Esser
Leupold & Stevens
Los Angeles Scient. Instr
Lufkin Rule Co.
Meyer-Opticraft
Moran Instr. Corp.
NRD Instrument Co.
Nuclear-Chicago
Opplem Co., Inc.
Pittsburgh Instr. & Mach.
Post Co., Frederic
Republic Lens Co.
Shepard Labs.
Speedometer Electric
Speidel & Co.
Sperry-Sun Well Survey
Sprengnether Instr. Co
Starrett Co.
Stratex Instr. Co
Suverkrop Instruments
Thermometer Corp.
Ulmer Co., J. C.
United States Blue Print
Wallace & Tiernan
Warren-Knight
Weber & Co.
White Co., Inc.
Wild Heerbrugg
Wood Counter Lab.
Zeiss, Inc., Carl

SURVEYING INSTRUMENTS. Underground, for wells or bore holes (see also Geophysical Instruments, also Oil Well Instruments)
Anton Electronic Labs.
Berger Scient. Supps
Berger & Sons
Brunson Instr.
Bruning Co., Inc
Eastman Oil Well
Electro-Mechanical Dev. Co
Engis Equipt. Co.
Georator Corp.
Gulton Industries
Gurley, W. & L. E.
Graf-Apsco Co.
Halliburton Oil Well
Helland Div.
Jarrell-Ash
Jordon Electronics
Lenox Instrument Co
Los Angeles Scient. Instr
Mt. Sopris Instr. Corp
Menlo Research Lab
Radioactive Products
Seismograph Service Corp
Sperry-Sun Well Surveying
Victoreen Instr. Co.
Warren-Knight
White Co

SURVEYOR'S CHAINS. see Surveying Instruments

SURVEYORS' FOOT METERS
Graf-Apsco Co.
Speedometer Electric
Wild Heerbrugg

SUSPENSION RIBBON
Baker & Co., Inc.
Cohn Mfg. Co., Sigmund
Manross & Sons, Div.
Miller Corp., William
Precision Products
Secon Metals Corp.

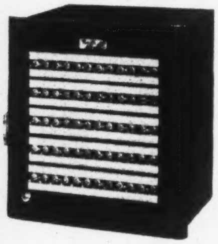
SWITCHBOARDS
Amer. Kloeckner-Moeller
Amer. Mach. & Foundry
Ampco Mfg. Co
Auto. Electric Sales
Bunnell & Co., J. H
Cutler-Hammer
Electro Devices (St. Louis)
Electro Devices, Inc
Fed. Telephone & Radio
General Control Co.
GE, Apparatus Sales
Gustaveson, Inc.
I.T.E. Circuit Breaker
Intelex Systems
Lake Erie Electric
Mullenbach Div.
Nelson Electric Mfg
North Electric
Northeastern Engrg., Inc
Panellit, In.c.
Pax Electronics
Penn Panel & Box Co.
Ram Meter, Inc.
Swam Electric Co
Stromberg-Carlson
Std. Elect. Time Co.
Tech. Oil Tool Corp.
U. S. Instr. Corp.
Virginia Electronics
Walker Div.
Warren Mfg. Co
Webb Co., Jervis B.
Westinghouse Electric

SWITCHES, Air Operated
Aero Instr. Co.
Amer. Kloeckner-Moeller
Automatic Control Co.
Autom. Timing & Controls
Automation Prod. Inc.
Barksdale Valves
Bellows Co.
Black, Sivalls & Bryson
Bristol Co.
Burton Mfg. Co.
CBS-Hytron Div.
Century Electronics & Inst-
Cleveland Controls
Climax Div.
Consol. Controls Corp
Cook Electric
Cooper Co., Clark
Dietz Co., Henry G.
Dwyer Mfg. Co.
Furnas Electric
GE
Gas Appliance Specialties
General Controls Co
Giannini & Co., G. M.
Gorn Electric
Hetherington, Inc.
Hobbs, John W.
Johnson Service Co.
Manning, Maxwell & Moore
Mason-Neilan Div.
Meletron Corp.
Mercoid Corp.
Miller-Robinson
Minneapolis-Honeywell Indust. Div.
Moore Products
Mu-Switch Corp.
Powers Reg. Co.
Rotron Div.
Seely Instr. Co.
Servonic Instruments
Shallcross Mfg. Co.
Sheffield Corp.
United Elect. Cont.
U. S. Gauge Div.
Weston Instrs.

SWITCHES, Counteractuating
Anatran Engrg. Corp
Autom. Elect. Sales Corp
Basic Controls, Inc.
Cook Electric
Daystrom Instr. Div.
Dittmore & Freimuth
Electrical Devel.
Electro-Snap Switch
Electro-Tech. Equipt Co
Endevco Corp.
Farmer Electric
General Controls
Hetherington, Inc.
Intelex Systems
Jo-Bell Products Div.
Landis & Gyr
Lumenite Electronic
Maxson Int. Div.
Micro Switch Div.
Post Machinery Co
Production Instr. Co.
Recora Co.
Ribble Engrg. Co
Stromberg-Carlson
Unimax Switch Div.

SWITCHES, Instrument, including Wiping, Selecting, etc.
Adams & Westlake
Aerovox Corp.
Allied Control Co., Inc
Amer. Kloeckner-Moeller
American Phenolic
Applied Science Corp.
Automatic Electric
Automatic Switch
Barber-Colman
Breeze Corporations
Bristol Co.
Brit. Electronic Sales Co.
Carling Electric
Carter Parts Co.
Centralab Div.
Cinema Engrg. Co.
Clarostat Mfg. Co.
Cook Electric
Dalmotor Co.
Daven Co.
Eastern Specialty Co
Electro Devel. Co.
Electro Tec Corp.
Electro-Miniatures Corp.
Electro Switch Corp.
Electro-Snap Switch
Electro-Tech Equip.
Endevco Corp.
Federal Screw Prods.
Foxboro Co.
General Control Co.
GE
General Radio Co.
Gervos Instruments
Giannini & Co., G. M.
Clark Controller
Globe Industries
Gordon Co., Claud S.
Grammes & Sons, Inc.
Grayhill
Hart Mfg. Co.
Haydon Switch, Inc.
Henschel Corp.
Hetherington, Inc.
Hunter Spring Co.
Illinois Testing Labs.
Indus. Instruments
Insuline Corp. of Amer.
Internat. Instruments
J-B-L Instr. Co.
J-B-T Insts., Inc.
Kulka Elect. Mfg.
Landis & Gyr
Leeds & Northrup
Lewis Engrg. Co.
Mason Electric
Mercoid Corp.
Merkle Korff Gear Co
Micro Switch Div.
Microloc Corp
Molded Insulation Co.
Mossman, Inc., Donald
Muirhead Instrument
Oak Mfg. Co.
Ohmite Mfg. Co.
Phaostron Co.
Pollak Corp., Joseph
Precision Parts Co.
Production Instr. Co.
Reisner Mfg. Co.
Roller-Smith
Sampson Chem. & Pigm
Sealectric Switch & Relay
Shallcross Mfg. Co.
Sibley Co.
Switchcraft, Inc.
Stromberg-Carlson
Struthers-Dunn
Torq Engineered Prod
Thwing-Albert
Unimax Switch Div.
U. S. Instr. Corp.
Weller Mfg. Co.
Wells Co., Gary

SWITCHING SYSTEMS
For Thermocouples or Resistance Bulb Circuits


Key-Type Switch Unit

T-E's variety of compact, durable switching systems lets you choose the one best suited to your circuit needs.

Rotary Selector Switch "Shorting-type" switches for quick checking or switching of sensing elements. Maximum, 24 points.

Key Switches Will connect many sensing elements to one instrument or transfer them from one instrument to another. Maximum, 144 points.

Push Button Switches Permit on-off checking or averaging of temperatures from many points. Maximum 72 points.

Quick-Coupling Connector Panels Provide great flexibility in transferring large numbers of thermocouples. Unlimited Capacities.

Also a wide selection of quick-coupling plugs and jacks for all thermocouple assemblies.

Write for Bulletin 24-FF

***Thermo Electric** Co. Inc*
Saddle Brook, New Jersey
In Canada—
Thermo Electric (Canada) Ltd., Brampton, Ont.
For more information circle **306** on inquiry card.

Westinghouse Electric
Winslow Co., Inc.
Wirt Company

SWITCHES, Key

Aerovox Corp.
Allen-Bradley
Amer. Kloeckner-Moeller
Atocon Corp.
Ark-Les Switch Corp
Automatic Electric
Autom. Elect. Sales Corp
Central Scientific
Cinema Engrg. Co
Clare & Co., C. P.
Cutler-Hammer
Fed. Telephone & Radio
Foxboro Co.
General Control Co.
GE Const. Materials Div.
Hetherington, Inc.
Industrial Instrs.
Kellogg Switchboard
Leeds & Northrup
Mallory & Co., P. R.
Mossman, Inc., Donald
Muirhead Instrument
North Electric
Pax Electronics
Pollak Corp., Joseph
Stromberg-Carlson
Switchcraft, Inc.
Thermo-Electric Co.
U. S. Instr. Corp.
Winslow Co., Inc.

SWITCHES, Knife

Aerolite Electronics
Amer. Kloeckner-Moeller
Cutler-Hammer
GE, Apparatus Sales
Haydon Switch
Hetherington, Inc.
I T E Circuit Breaker
JFD Mfg. Co.
Leeds & Northrup
National Tel-Tronics
Newark Electric Co.
Penn Panel & Box Co.
Rodale Mfg. Co.
Stromberg-Carlson
Unimax Switch Div.
Winslow Co., Inc.

SWITCHES, Limit

Aero Div. (R-F)
Allen-Bradley
Amer. Kloeckner-Moeller
Assembly Products
Automatic Control
Autom. Elect. Sales Corp
Clark Controller
Controls Co. of Amer.
Cook Electric
Cutler-Hammer
Daven Co.
Denison Mfg. Co., R. B.
Electra Mfg. Co.
Electro-Snap Switch
Electro-Tech Equip.
Energy Kontrols, Inc.
Farmer Elect. Prods.
Furnas Electric
General Control Co.
General Controls Co.
GE, Apparatus Sales
GE Gen. Purp. Contr.
Haydon Switch, Inc.
Humphrey, Inc.
Ideal-Aerosmith
Illinois Tool Works
Jo-Bell Products, Inc.
LR Electronics
Larson Instrument
Lear, Inc.
Mercoid Corp.
Micro Switch Div.
Monitor Controller Co.
Photo Crystals, Inc.
Potter Aeronautical
Precision Mechanisms
Sarco Co., Inc.
Sealectric Switch & Relay
Spencer Thermostat Div.
Tuttle & Kift, Inc.
Unimax Division
United Electric Controls
Webb Co., Jervis B.
Westinghouse Electric

SWITCHES, Magnetic

Allen-Bradley
Allied Control Co.
Allis-Chalmers
Amer. Kloeckner-Moeller
Anatran Engrg. Corp.
Arizona Ceramics, Inc.
Arnoux Corp.
Arrow-Hart & Hegeman
Autocall Co.
Autom. Switch Co.
Autom. Timing & Controls
B/W Controller
Basic Controls, Inc.
Butler Mfg.
C. G. S. Labs.
Clark Controller Co.
Cooper Co., Clark
Cook Electric
Cutler Hammer
Elgin Natl. Watch
Furnas Electric
Gems Co.
General Cement Mfg.
GE, Apparatus Sales
GE Gen. Purp. Contr.
Gordos Corp.
Gorn Electric
Guardian Elect. Mfg. Co.
H-B Instrument
Hart Mfg. Co.
Hetherington, Inc.
Jaidinger Mfg. Co.
Jo-Bell Products
Liquidvision 'Gauge & Con.
Lumenite Electronic
Mack Electric Devices
Mercoid Corp.
Micro Switch Div.
Minn-Honeywell, Boston
Monitor Controller Co.
Monroe Calc. Mach. Co.
Ohmite Mfg. Co.
Pollak Corp.
Post Machinery Co.
Potter Instr. Co.
Revere Corp. of Amer
Ronar, Inc.
Soreng Products
Telemeter Magnetics, Inc
Tork Clock
Vickers Electric Div.
Ward Leonard Electric
Zenith Electric

SWITCHES, Mercury

Almo Mfg. Co.
Arizona Ceramics, Inc.
Arrow-Hart & Hegman
Bernco Engrg. Corp.
Climax Div.
Chatham Electronics
Continental Electric
Detroit Controls Corp.
Durakool, Inc.
Ebert Electronics
Edna Lite Co.
Electric Switch Corp.
Electronic Apparatus
Electronic Products
Electro-Tech Equipment
Energy Kontrols
Fredericks, George E.
General Cement Mfg.
General Controls Co.
GE Const. Materials Div
Glass-Soldering Engrg.
Gordos Corp.
Guardian Elect, Mfg. Co
H-B Instr. Co.
Hamlin, Inc.
Hermaseal Co., Inc.
Hetherington, Inc.
Kahl Scientific Instr.
Landis & Gyr
Littelfuse, Inc.
Mack Electric Devices
Magnetrol Inc.
McAlear Mfg. Div.
Mercoid Corp.
Mercury Contacts
Micro Switch Div.
Minneapolis-Honeywell,
  Indus. Div.
Mt. Sopris Instr. Corp.
Panellit, Inc.
Powrex Switch Co.
R-B-M Mfg. Co.
Radiation Counter Labs.
Rhodes, Inc.
Ronar, Inc.
Sampson Chem. & Pigm.
Standard Electrical Prods
Tensitron, Inc.
Tigerman Engrg. Co
Transval Engrg. Corp.
Victoreen Instr. Co.

SWITCHES, Pressure

Aero Div. (R-F)
Aero Instr. Co.
Allen-Bradley
Amer. Chain & Cable
Amer. Kloeckner-Moeller
Assembly Products
Autom. Control Co.
Automation Prods., Inc.
Barksdale Valves
Barton Instr.
Bendix-Friez
Black, Sivalls & Bryson
Bristol Co.
Burton Mfg. Co.
Carruthers & Fernandez
Century Electronics & Insts.
Colvin Labs., Inc.
Consolidated Controls Corp.
Controls Co. of Amer.
Cook Electric Co.
Cooper Co., Clark
Cutler-Hammer
Dietz Co., Henry G.
Dwyer Mfg. Co., F. W.
Edcliff Insts.
Electra Mfg. Co.
Furnas Electric
Gems Co.
General Controls Co.
GE, Apparatus Sales
GE Gen. Purp. Contr.
Giannini & Co., G. M.
Gorn Electric
Guardian Elect. Mfg. Co.
Halax Corp.
Hawk Tool & Engrg. Co
Hays Mfg. Co.
Healy-Ruff
Henschel Corp.
Hydraulic Res. &Mfg. Co.
I. T. E. Circuit Breaker
Johnson Service Co.
Lear, Inc.
Leonard Inc., Wallace O.
Mallory & Co., P. R.
Manning, Maxwell & Moore
Mason-Neilan Div.
Meletron Corp.
Mercoid Corp.
Minneapolis-Honeywell
  Indust. Div.
Natl. Pneumatic Co.
Oil Dyne, Inc.
Panellit, Inc.
Phaostron C.
Recora Co.
Riverside Mfg.
Sarco Co.
Servonic Instruments
Shallcross Controls
Sheffield Corp.
Slater Electric
Synchro-Start Products
Trans-Sonics
Ultradyne Engrg. Labs.
United Electric Controls
U. S. Gauge Div.
Vickers, Inc.
Viking Instruments
Water Level Controls
Westinghouse Electric

SWITCHES, Push Button

Aero Div. (R-F)
Alden Products
Allen-Bradley
Amer. Kloeckner-Moeller
American-Monarch
Arizona Ceramics Inc.
Automatic Switch
Autom. Elect. Sales Corp.
Bristol Co.
Brit. Electronic Sales Co.
Carling Electric
Carter Parts Co.
Clark Controller
Clarostat Mfg.
Control Products, Inc
Controls Co. of Amer
Cooper Co., Clark
Cutler-Hammer
Edwards Co., Inc.
Electra Mfg. Co.
Electro-Snap Switch
Electro-Tech Equip.
Furnas Electric
General Control Co.
GE, Apparatus Sales
GE Const. Materials Div.
GE Gen. Purp. Contr.
Grayhill
Guardian Elect. Mfg. Co.
Hart Mfg. Co.
Haydon Switch, Inc.
Henschel Corp.
Hetherington, Inc.
Illinois Tool Works
Intelex Systems
J-B-L Instr. Co.
Jaidinger Mfg. Co.
Kellogg Switchboard
Kirkland Co., H. R.
Leeds & Northrup
Mallory & Co., P. R
Marco Industries
Micro Switch Div.
Monitor Controller Co
Mossman, Inc., Donald P.
Newark Electric Co.
North Electric
Oak Mfg. Co.
Phaostron Co.
Pollak Corp., Joseph
Sealectric Switch & Relay
Shallcross Mfg. Co.
Smith, Inc., Herman H.
Spencer Thermostat Div.
Square D Co.
Stackpole Carbon Co
Stromberg-Carlson
Switchcraft
Thermo-Electric Co.
Tigerman Engrg. Co.
Unimax Switch Div.
U. S. Instr. Corp.
Westinghouse Electric

SWITCHES, Pyrometer

Arrow-Hart & Hegeman
Assembly Products
Barber-Colman
Bristol Co.
Daven Co
Electro-Tech Equip.
Engelhard, Chas.
Foxboro Co.
General Cement Mfg.
GE, Apparatus Sales
Gordon Co., Claud S.
Illinois Testing Labs.
J-B-L Instr. Co.
Leeds & Northrup
Lewis Engrg. Co.
Mack Electric Devices
Mallory & Co., P. R.
Minneapolis-Honeywell
  Indust. Div.
Pyrometer Instr. Co.
Revere Corp.
Rowe Engrg. Co.
Shallcross Mfg. Co.
Thermo-Electric Co.
Thwing-Albert
Triplett Electcl. Instr.
United States Instr. Corp
Wabash Metal Prod.
Westinghouse Electric
Weston Instrs.
Wheelco Instr. Div.
Winslow Co.

SWITCHES, Relay, see Relays

SWITCHES, Rotary, including Shaft Motion Types

Airflyte Electronics
Allard Instr. Co.
Allen-Bradley
Allis-Chalmers
Anatran Engrg. Co
Arizona Ceramics
Arnhold Ceramics
Arrow-Hart & Hegeman
Autocall Co.
Automation, Inc
Autom. Elect. Sales Co.
Betts & Betts
Bin-Dicator Co.
Bird Electronic
Black, Sivalls & Bryson
Brown Electro-Measmt.
Cardwell Mfg. Co.
Clare & Co., C. P.
Clark Instr. Co.
Clarostat Instr. Co.
Computer Insts. Corp.
Consol. Electrodynamics
Controls Co. of Amer.
Couch Ordnance, Inc.
Cutler-Hammer
Daystrom Instr. Div.
Detroit Controls Corp.
Dittmore & Freimuth
Eastern Prec. Resistor Co.
Elcor, Inc.
Electro Devices Inc.
Elematic Equipt. Corp.
Elgin Natl. Watch
Farmer Electric
Federal Telephone & Radio
Furnas Electric
General Cement Mfg.
General Devices, Inc.
GE, Apparatus Sales
GE Const. Materials Div.
GE Gen. Purp. Contr.
Gray Instr. Co.
H-B Instr. Co.
Instrument Dev. Labs.
Kahn & Co.
Kellogg Switchboard
Lear, Inc.
Leland, Inc., G. H.
Lewis Engrg. Co.
Lumenite Electronic
Mallory & Co., P. R.
Meter Devices Co.
Minneapolis-Honeywell
  Indust. Div.
  Rubicon Instrs.
Monitor Controller Co
Newark Electric Co.
North Electric
Norwood Controls
Photocircuits Corp
Revere Co.
Scient. Inst. Dev. Lab.
Sensitive Research Instr.
Shallcross Mfg. Co.
Square D Co.
Swanson Engrg. Co.
Tech Labs., Inc.
Thermo-Electric Co.
Thompson Products
Tigerman Engrg. Co.
Torq Engineered Prod.
Transval Engrg. Corp.
Triplett Electcl. Instr.
Tuttle & Kift, Inc.
United Optical
Utah Radio Prods.
Vapor Recovery Systems
Vectron, Inc.
Wabash Metal Prod.
Ward Leonard Electric
Wheelco Instr. Div.

SWITCHES, Sealed

Adams & Westlake
Allied Control Co.
Applied Science Corp.
Autom. & Prec. Mfg. Co.
Baso, Inc.
Bernco Engrg. Corp.
Bristol Co.
Clarostat Mfg. Co.
Computer Instr. Corp
Controls Co. of Amer.
Cook Electric
Couch Ordnance, Inc.
Cutler-Hammer
Daven Co.
Denison Mfg. Co., R. B.
Durakool, Inc
Ebert Electronics
Edison, Inc., Thomas A.
Electra Mfg. Co.
Electronic Products
Electro-Miniatures Corp
Electro-Snap Switch
Energy Kontrols, Inc.
Engineered Electronics
Fasco Industries
Fedl. Telephone & Radio
Gems Co.
General Controls Co.
GE Apparatus Sales
Genl. Hermetic Sealing
Giannini, G. M.
Gordos Corp.
Grayhill
Guardian Elect. Mfg. Co
Hamlin, Inc.
Hart Mfg. Co.
Haydon Switch, Inc.
Hermaseal Co., Inc.
Hetherington, Inc.
Illinois Tool Works
Insuline Corp. of Amer.
Jo-Bell Products
Kurman Electronics
Mack Electric Devices
Mallory & Co., P.R.
Mason Electric
Mercoid Corp.
Micro Switch Div.
North Electric
Ohmite Mfg. Co.
Phaostron Co.
Photo-Crystals, Inc.
R-B-M Mfg. Co.
Revere Corp. of Amer.
Scaico Controls
Sealectric Switch & Relay
Servonic Instruments
Shallcross Mfg. Co.
Spencer Thermostat Div.
Tech Labs., Inc.
Unimax Switch Div.

SWITCHES, Snap Action

Aero Div. (R-F)
Allen-Bradley
Amer. Kloeckner-Moeller
Arizona Ceramics, Inc.
Arnhold Ceramics
Arrow-Hart & Hegeman
Autom. Electric
Autom. Timing & Controls
Betts & Betts
Black-Sivalls & Bryson
Brit. Electronic Sales Co.
Carbon Div.
Carling Electric
Carter Parts Co.
Channer Corp.
Chicago Telephone Sup.
Clark Controller Co.
Clarostat Mfg. Co.
Comar Electric
Control Products
Controls Co. of Amer.
Cook Electric
Cooper Co., Clark
Curtiss-Wright
Cutler-Hammer
Daven Co.
Denison Mfg. Co., R. B.
Edwards Co., Inc.
Electra Mfg. Co.
Electro-Snap Switch
Electro Switch Corp.
Electro-Tech Equip.
Fasco Industries, Inc.
Fenwal, Inc.
General Cement Mfg.
General Controls Co.
GE, Apparatus Sales
GE Const. Materials Div.
GE, Gen. Purp. Controls
Grayhill
Guardian Elect. Mfg. Co
Hart Mfg. Co.
Hawk Tool & Engrg. Co
Haydon Switch, Inc.
Hermetic Sealing Corp
Hetherington, Inc.
Hubbell, Inc., Harvey
Illinois Tool Works
J-B-L Instr. Co.
J-B-T Insts., Inc.
Jaidinger Mfg. Co.
Jo-Bell Products
Kulka Electric Mfg.
Leeds & Northrup
Mallory & Co. P. R.
Manning, Maxwell & Moore
Mason Electric Corp.
McAlear Mfg. Div.
Mercoid Corp.
Micro Switch Div.
Miller-Harris Instr.
Minneapolis-Honeywell,
  Indus. Div.
Newark Electric Co.
Perfex Corp.
Phaostron Co.
Pollak Corp., Joseph
Revere Corp.
Sealectric Switch & Relay
Smith, Inc., Herman H.
Spencer Thermostat Div.
Square D Co.
Stackpole Carbon
Tech Labs., Inc.
Telex, E-A Div.
Thermador Electcl. Mfg.
Torsion Balance
Ulanet Co.
Unimax Division
United Electric Controls
Ward Leonard Electric
Wirt Company

SWITCHES, Stepping, Including Motors, Step Type (see also Relays)

Advanced Products Co.
Amer. Phenolic Corp.
Amglo Corp.
Autom. Electric
Autom. Elect. Sales Corp.
Automatic Control
Barber-Colman
Clare & Co., C. P.
Controls Co. of Amer.
Cook Electric
Cutler-Hammer
Daven Co.
Dietz Co., Henry G
Eagle Signal Corp.
Electric Switch Corp
Electro-Miniatures Corp
Electro Tec Corp.
Endevco Corp.
Engineered Electronics
Fed. Telephone & Radio
Furnas Electrical
General Communication
General Control Co.
GE Apparatus Sales.
Giannini & Co.
Globe Industries
Guardian Electcl. Mfg. Co.
Haydon Co., A. W.
Hetherington, Inc.
Imtra Corp.
Instr. Dev. Labs.
Intelex Systems
Kellogg Switchboard
Land-Air, Inc.
Leetronics, Inc.
Leland, Inc.
Lumenite Electronic
Mallory & Co., P. R.
Mason Electric
North Electric
Oak Mfg. Co.
Phaostron Co.
Precision Parts Co.
Raymond Lab., Inc.
Recora Co.
Sealectric Switch & Relay
Shallcross Mfg. Co.
Sigma Instruments
Stepper Motors Corp.
Stromberg-Carlson
U. S. Instr. Corp.

SWITCHES, Thermostatic

Advance Electric
Allen-Bradley
Barber-Colman
Bendix, Friez
Betts & Betts
Bridgeport Thermostat
Bristol Co.
Burling Instr. Co.
Cardinal Instrumentation
Control Products
Controls Co. of Amer.
Cook Electric
Cutler-Hammer
Dickson Co.
Edison, Inc., Thomas A.
Fenwal, Inc.
G-V Controls
General Cement Mfg.
General Controls Co.
GE, Apparatus Sales
Gleason-Avery
Hart Mfg. Co.
Hawk Tool & Engrg. Co.
H-B Instruments Co.
Intercontinental Dynamics
Jaidinger Mfg. Co.
Larson Instr.
Mack Electric Devices
Manning, Maxwell & Moore
Mech. Industs. Prodn. Co.
Mercoid Corp.
Micro Switch Div.
Minitec
Perfex Corp.
Powers Reg. Co.
Prec. Thermom. & Insts.
Reynolds Electric
Scaico Controls
Shallcross Mfg. Co.
Spencer Thermostat Div.
Struthers-Dunn
Thwing-Albert
Tuttle & Kift, Inc.
Ulanet Co.
Unimax Switch Corp.
United Control Corp.
United Electric Controls
United Electronic Controls
Viking Instruments
Ward Leonard Electric
Weston Instrs.
Wheelco Instr. Div.

SWITCHES, Time

A'G'A Div.
Advanced Products Co.
Aemco Inc.
Alina Corp.
Allen-Bradley
Anderson, A. & J. M.
Autocall Co.
Autom. Timing & Controls
Autom. Electric
Automatic Controls
Barber-Colman
Betts & Betts
Bristol Co.
Bristol Motor Div.
Central Scientific
Cincinnati Time Rec.
Clark Controller Co.
Controls Co. of Amer.
Cook Electric
Cramer Controls Corp.
Curtiss-Wright
Cutler-Hammer
Dietz Co., Henry G.
Dietz Design & Mfg.
Dimco-Gray
Durakool Inc.
Eagle Signal Corp.
Edison Instr. Div.
Electro-Tech. Equipt.
Electronic Specialty Co.
Electyme Motor Prods.
Elgin Natl. Watch
Ferrara, Inc.
G-V Controls
General Cement Mfg.
General Control Co.
General Controls Co.
GE, Apparatus Sales
GE Clock & Timer Dept.
Guardian Electl. Mfg.
Haledy Electronic Co.
Haydon Co., A. W.
Haydon Mfg. Co.
Hetherington, Inc.
Industrial Timer Corp
Internat. Register Co.
Jaidinger
Johnson Service Co
Kopp Scientific
Landis & Gyr
Leich Electric
Liebel-Flarsheim
Lumenite Electronic
Mallory & Co., P. R.
Miller-Harris Instr. Co
Minneapolis-Honeywell
Montgomery Mfg. Co.
Newark Electric Co.
Newmatic Corp.
Paragon Electric
Perfex Corp.
Photovolt Corp.
Precision Products, Inc.
Ribble Engrg. Co.
Richardson-Allen
Rhodes, Inc., M. H.
Sangamo Electric
Scientific Industries
Seely Instr. Co.
Square D Co.
States Co.
Stoelting Co.
Stromberg Time Corp.
Thomas Clock
Thompson Clock
Time Controls
Tork Time Controls
Ulanet Co.
Walker-Jamieson
Walser Automatic Timer
Ward Leonard Electric
Westinghouse Electric
Wilson & Co.
Yellow Springs Instr.
Zenith Electric

SWITCHES, Vacuum

Aero Instr. Co.
Allen-Bradley Co.
Barksdale Valves
Bendix, Eclipse-Pioneer
Bristol Co.
Century Electronics
Chatham Electronics Div.
Consolidated Controls Corp.
Colvin Labs.
Cook Electric
Cooper-Hewitt Elect.
Cutler-Hammer
Dietz Co., Henry G
Dwyer Mfg. Co., F. W.
Ebert Electronics
Eitel-McCullough
Energy Kontrols, Inc
General Controls Co
GE, Apparatus Sales
GE Components Div.
GE Gen. Purp. Contr.
GE, Tube Dept.
Gordos Corp.
Gorn Electric
Hetherington, Inc.
Jennings Radio Mfg. Corp.

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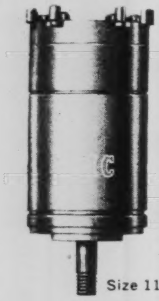

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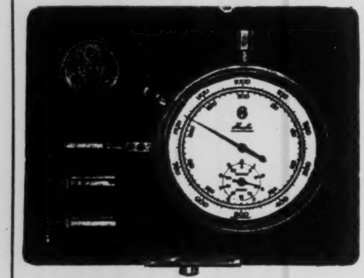

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with separate reset button
for cumulative readings

DURABILITY:
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ACCURACY:
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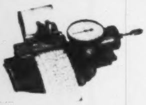

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Kinney Mfg. Div.
Mack Electric Devices
Manning, Maxwell & Moore
Merwold Corp.
Photo-Crystals, Inc.
Pioneer Electronics
Sampson Chem. & Pigm.
Sealco Controls
Thermix Corp.
United Electric Controls
U. S. Gauge Div.

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Cedar Engrg. Co.
Clifton Prec. Prods.
Control Data Corp.
Diehl Mfg.
Edison, Inc., Thomas A.
Electric Indicator Co.
Ford Instr. Co.
GE Apparatus Sales
Globe Industries, Inc.
Harowe Precision, Inc.
Helipot Div.
Henschel Corp.
Induction Motors Corp.
Kearfott Co., Western Div.
Kollsman Instr. Corp.
Lear, Inc.
Lectronic Research Labs.
Luther Mfg. Co.
Mark Instr. Co.
Minneapolis-Honeywell, Boston Div.
Muirhead Instrument
Norden-Ketay
Oster Mfg. Co., John
Radex Corp.
Robertshaw-Fulton, Aeron
Servo Systems
Small Motors, Inc.
Stepper Motors Corp.
Thordarson-Meissner
Transicoil Corp.
U. S. Gauge Div.
Vickers Elect. Div.

SYNCHRONOUS MOTORS, see Motors, Synchronous

SYNCHROSCOPES

Control Corp.
Bendix, Eclipse
DuMont Lab., Allen B.
Electric Controller
Feiler Engrg. Co.
GE Apparatus Sales
Haledy Electronic Co.
Hickok Electl. Instr.
Hycon Mfg. Co.
Kollsman Instr. Corp.
Millen Mfg. Co.
Roller-Smith
Square D Co.
Tektronix, Inc.
Telechrome, Inc.
T. L. G. Electric
Triplett Electl. Instr.
United Optical
Westinghouse Electric
Weston Instrs.

TACHOGRAPHS

Amthor Testing
Biddle Co., James G.
Cramer Conts. Corp.
Matisa Equipment
Metron Instr. Co.
Sangamo Electric
Scherr Co., Inc.
Sticht Co., Herman H.
Zeiss, Inc., Carl
Zernickow Co.

TACHOMETER TESTERS

American Time Prods.
Amthor Testing
Associated Research
B & H Instr. Co.
Berkeley Div.
Biddle Co., James G.
Boulin Instrument Corp.
Consolidated Avionics
Elect. Tachometer Corp.
Engineering Res. & Devel.
Gadgets Inc.
GE
Globe Industries
Howell Instr. Co.
Ideal Lab. Tool
I-L-S Instr. Corp.
Martindale Electric
Matisa Equipment
Pacific Scientific
Potter Instr. Co.
Precision Scientific
Robertshaw-Fulton
Rowe Engrg. Co.
Servospeed Div.
Servo-Tek Prods. Co.
Standard Elect. Time
Sticht Co., Herman H.
Sun Mfg. Co.
Sunshine Scientific
Systron Corp.
Taller & Cooper, Inc.
United Mfg. Co. Div.
Wang Labs., Inc.
WacLine, Inc.
Westport Electric
Zeiss, Inc., Carl
Zernickow Co.

TACHOMETERS, Centrifugal

Amthor Testing
Associated Research
Barbour Stockwell Co.
Bendix-Eclipse-Pioneer
Biddle Co., James G.
Boulin Instr. Corp.
Corbin Screw Corp.
Durant Mfg. Co.
Elect. Tachometer Corp.
Electro-Tech Equip.
Foxboro Co.
GE
Hays Corp.
Instrument Associates
Jones Motrola Corp.
Kahn & Co.
Manning, Maxwell & Moore
Martindale Electric
Scherr Co., Inc.
Seedburo Equipment
Square D Co.
Stewart-Warner
Sticht Co., Herman H.
Testing Machines, Inc.
Veeder-Root
Viking Instr. Co.
Zernickow Co.

TACHOMETERS, Chronometric

Amthor Testing
Associated Research
Bendix Aviation Corp.
Berkeley Div.
Biddle Co., James G.
Boulin Instr. Corp.
Computer Measmts. Corp.
Cramer Controls Corp.
Elect. Tachometer Corp.
Electro-Tech Equip.
Elgin Natl. Watch Co.
Epic, Inc.
Hasler-Tel
I-L-S Instr. Corp.
Jaeger Watch Co.
Marx Co., Clarence J.
Matisa Equipment
Pierce Watch Co.
Potter Instr. Co.
Scherr Co., Inc.
Std. Elect. Time
Stewart-Warner Corp.
Sticht Co., Herman H.
Technical Oil Tool Corp.
Testing Machines, Inc.
Westport Electric
Wright Engrg. Co.
Zernickow Co.

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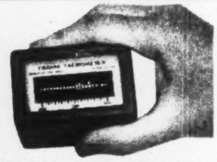

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METRON TACHOMETERS

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B-614

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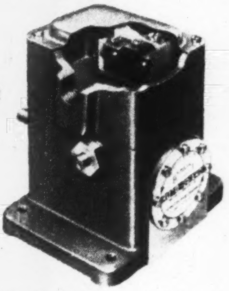
SHAFT MOTION INDICATOR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PROTECTS conveyors • elevators • feeders • belt conveyors
OPERATING SPEEDS of 10 to 150 rpm make the **ROTO-GUARD** applicable to automatic protection of slow-moving machinery used in material handling and similar systems
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Air Equipment
Airpax Products
American Electronics
Associated Research
B & H Instr. Co.
Bailey Meter Co
Barbour Stockwell Co.
Beckman & Whitley
Bekey Elect. Co
Bendix-Eclipse-Pioneer
Berkeley Div.
Bristol Co.
Builders-Providence
Burton Mfg. Co.
Chicago Elect. **Tachometer**
Clarke Instr. Corp.
Control Engrg. Co
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D & R, Ltd.
Detectron Co.
Diehl Mfg. Co.
Dymec Inc
Dynapar Corp.
Eastern Air Devices
Elect. Auto-Lite
Elect. Indicator Co.
Elect. Speed Indic. Co.
Elect. Tachometer Corp.
Electrical Devel
Electro Engrg. Prod. Co.
Electro Mechanical Dev. Co
Electro-Mechano Co.
Electronic Measmts. Corp.
Engineering Res. & Devel
Erie Instrumentation
Esterline-Angus
Fielden Instr. Div
Ford Instr. Co
Foxboro Co.
G.E. Apparatus Sales
General Radio
Hastings Instr. Co.
Hathaway Instr. Co.
Hays Corp
Hellpot Div
Henschel Corp
Hewlett-Packard
Hickok Electcl. Instr.
Howell Instr. Co
Ideal Indsts., Inc.
I-L-S Instr. Corp.
Instrument Associates
Instrument Lab. Inc
Internatl. Res. & Devel
Jaeger Watch
J-B-T Instruments
Jones-Motrola Sales
Kay Electric
Kintel
Kearfott Co., Inc
Kollsman Instr. Corp.
Lear, Inc
Marion Electl. Instr. Co
Martin-Decker
Marx Co., Clarence J
Matisa Equipment
Metron Instr. Co.
Micro Balancing, Inc.
Minneapolis-Honeywell
  Boston Div
Moisture Register Co.
Natl. Instr. Co.
Norden-Ketay Corp.
North Atlantic Indusis
Nuclear Research
Photocon Research
Pioneer Magnetics
Pitometer Log Corp
Potter Aeronaut. Co
Potter Instr. Co
Power Supplies
Raydyne Corp
Reliance Electric & Engrg
Rotating Components
Scherr Co., Inc
Servo-Tek Products
Shepard Labs
Square D Co.
Std. Elect. Time
Stewart-Warner
Sticht Co., Herman H
Sun Electric
Sunshine Scientific
Syntorque, Inc
Task Corp
Tech. Oil Tool Corp
Transicoil Corp.
Triplett Elect. Instr
WacLine, Inc.
Waltham Watch
Wang Labs., Inc.
Waugh Engrg. Co.
Westberg Mfg. Co.
Westinghouse Electric
Weston Instrs
Westport Electric
Westronics, Inc.
Winslow Co
Yellow Springs Instr. Co.

TACHOMETERS, Miscellaneous, including Cross Pendulum, Fly-ball, Ignition a tuated, Tilting-ring (see also Frequency)

Amthor Testing
Associated Research
Barbour Stockwell Co.
Biddle Co., James G
Boulin Instr. Corp.
Eitzen Co., Louis C.
Elect. Tachometer Corp.
Electro-Mechano Co.
Electro-Tech Equipment
Engineering Res. & Devel
I-L-S Instr. Corp.
Jones-Motrola Corp.
Kahn & Co
Marx Co., Clarence J.
Nuclear Research
Performance Measmts. Corp
Potter Instr. Co.
Shephard Labs.
Stewart-Warner
Sticht Co., Herman H.
Sun Electric
Viking Instr. Co.
Wang Labs., Inc.
Westberg Mfg. Co
Zernickow Co.

TACHOMETERS, Recording

Amthor Testing
Bailey Meter Co.
Barber-Colman Co
Berkeley Div.
Biddle Co., James G.
Breeze Corp.
Bristol Co
Builders-Providence
Electr. Tachometer Corp
Electr. Devel. Co.
Engineering Res. & Devel
Engler Instr. Co
Esterline-Angus
Fielden Instr. Div.
GE. Apparatus Sales
Impact Register Co
Logan Engrg. Co.
Manning, Maxwell & Moore
Martin-Decker Corp.
Matisa Equipment
Metron Instr. Co.
Minneapolis-Honywell
  Indust. Div.
Optronic Co.
Potter Aeronaut Co.
Potter Instr. Co.
Scherr Co., Inc.
Sticht Co., Herman H
Systron Corp.
Waugh Engrg. Co.
Westberg Mfg. Co
Westinghouse Electric
Weston Instrs
Wheelco Div.
Zernickow Co

TACHOMETERS, Speed Limit Control

American Electronics
Askania Reg. Co.
B & H Instr. Co.
Barbour Stockwell Co.
Bendix, Eclipse-Pioneer
Bristol Co
Burton Mfg. Co
Dynapar Corp.
Electr. Tachometer Co.
Electric Indicator
Electro Mechano Co.
Engler Instr. Co
Erie Instrumentation
Fielden Instr. Div.
Flight Research Inc
GE. Apparatus Sales
Helipot Div
Howell Instr. Co.
I-L-S Instr. Corp.
Jones-Motrola Corp.
Kahn & Co
Marx Co., Clarence J
Matisa Equipment
Metron Instr. Co.
Nuclear Research
Pioneer Magnetics

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For Precise and Rapid Measurements of

SHAFT SPEEDS
SURFACE SPEEDS
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- **Magnetic Design** Steady readings accurate to ±0.5% at any part of any scale.
- **Instantaneous Reading** No timing or waiting.
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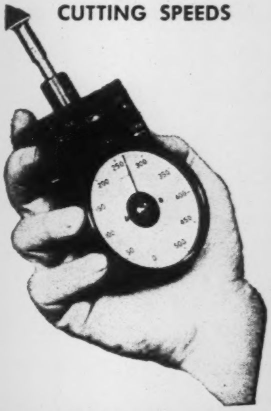
- **Hold Button** "memorizes" reading when desired.



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Universal Type UO with 5 ranges in one instrument. With overspeed protection.

CAT. NO. 303,	30-12,000 RPM	Many other models
CAT. NO. 314,	45-18,000 RPM	with one, three
CAT. NO. 322,	60-24,000 RPM	or five ranges.
CAT. NO. 346,	120-48,000 RPM	BULLETIN 750

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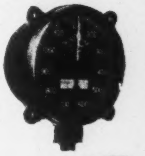

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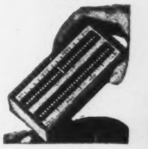

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Measure speed by touch. Many different ranges from 900-100,000 RPM.

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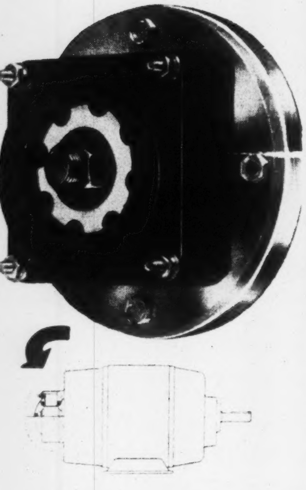

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Monitors Motor Speeds at a fraction of the cost of conventional units

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☐ We are also interested in fractional h.p. motors.
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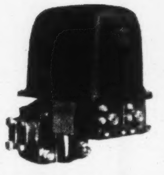

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For Flow and Differential Pressure Measurements

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Differential range of each diaphragm measuring element may be changed by a factor of 10 to 1 by a simple screwdriver adjustment.

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Sticht Co., Herman H.
Systron Corp.
Tipp-Tronic, Inc.
WacLine, Inc.
Wang Labs., Inc.
Westberg Mfg. Co
Weston Instrs.
Zernickow Co.

TACHOMETERS, Stroboscopic

Associated Research
Berkshire Labs.
Boulin Instr. Corp.
Clarke Instr. Corp.
Computer Co. of Amer.
Cubic Corp.
Davenport Mfg. Co.
Electronic Measmts. Co
Electro-Tech Equip.
Epic, Inc.
Fruengel Inc., Frank
GE, Apparatus Sales
General Radio Co.
I-L-S Instr. Corp.
Internatl. Res. & Devel.
Mercury Electronic Co.
Nankervis Co.
Opad Electric
Slaughter Co.
Standard Elect. Time
Stewart-Warner
Sticht Co., Herman H.

TACHOMETERS Vibrating Reed

Aero Instr. Co.
Biddle Co., James G
Epic, Inc.
J-B-T Instruments
Sticht Co., Herman H.
Testing Machines, Inc.
Verdell Instr. Sales
WacLine, Inc.

TACHOSCOPES

Amthor Testing
Biddle Co., James G.
I-L-S Instr. Corp.
Lafayette Instr. Co.
Scherr Co., Inc.
Sticht Co., Herman H.
Zernickow Co.

TAFFRAIL LOGS, Ship, see Marine Instruments

TALC

Baker Chem. Co., J. T.
Berkshire Chemicals
General Ceramics
Harshaw Chemical Co.
Kirchberger & Co.
Rhodes & Co.
Superior Steatite
Wagner Co., Inc., C. A

TANTALUM, see Precious Metals

TAPE, Magnetic Recording

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Allied Radio Corp.
ALWAC Corp.
Amer. Silver Co.
Ampex Corp.
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Electronic Mechanics
Librascope, Inc.
Minnesota Mining & Mfg
Newark Electric Co.
Northam Electronics
Orradio Industs., Inc.
Permo, Inc.
Polymer Corp. of Amer
RCA Tube Div.
Reeves Soundcraft
Remington Rand Univac
Robins Industries

TAPE RECORDERS, see Recorders, Magnetic Tape

TAPE STRETCHER APPARATUS

Testing Machines, Inc

TAPES, Oil Gager's

Bruning Co., Charles
Dietzgen Co.
Keuffel & Esser
Lufkin Rule Co.
Shand & Jurs
Starrett Co., L. S.
White Co., David

TAPES, Steel (see also Dimensional Gages)

Bruning Co., Inc.
Dietzgen Co
Gaertner Scientific
Graf-Apsco
Gurley, W. & L. E.
Keuffel & Esser
Lufkin Rule Co.
Miller Falls Co.
Speidel & Co.
Stanley Works
Starrett Co., L. S.
United States Blue Print
Warren-Knight Co.
Weber Co.
White Co., David

TAPES, Surveyor's, see Surveying Instruments

TAPS, Metric

Amer. Laubscher
Automatic Methods
Bayside Watch Tool
DoAll Co.
Engis Equipment Co
Ferner Co.
Fineisen, A. R.
Gallien, R. P.
Howard Clock Products
Hy-Pro Tool Co.
Jarvis Co., Chas
Landis Mach. Co.
Morris Co., J. I.
Pratt & Whitney
Sphinx American Co
Waltham Screw Co.
Woodruff & Stokes

TAPS, Special

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Continental Screw
DoAll Co.
Fineisen, A. R.
Gallien, R. P.
Hamilton Watch
Hy-Pro Tool Co.
Jerpbak-Bayless
Landis Mach. Co
Morris Co., J. I.
Pratt & Whitney
Sphinx American Co
Waltham Screw Co.
Woodruff & Stokes

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Bunnell & Co., J. H.
CGS Labs., Inc.
Commercial Controls Corp
Consolidated Avionics
Dresser Prods., Inc.
Ferranti Electric
Friden, Inc.
Gates Radio Co.
Intelex Systems
Kleinschmidt, Inc.
Monroe Calc. Mach. Co.
National Controls
P & H Electronics
Soroban Engrg.
Stelma, Inc.
Taller & Cooper, Inc.
Teletype Corp.
U. S. Instr. Corp.
Warren Mfg. Co.

TELEGRAPHY EQUIPMENT, including Keys, Switches, etc.

Alden Products
Ampco Mfg. Co.
Boehme, H. O., Inc.
Bunnell & Co., J. H.
CGS Labs, Inc.
General Control Co
Johnson Co., E. F.
LR Electronics
North Electric
Pax Electronics
Stelma, Inc.
Warren Mfg. Co
Winslow Co

TELEMETERING SYSTEMS, Electrical, including Remote-Control Equipment

A. R. F. Products
Adler Electronics
Aero Electronics
Aerophysics Dev. Corp.
Airborne Accessories
AiResearch Mfg.
Airflo Instr. Co.
Alden Elect. & Impulse
Amer. Electroneering
Amer. Electronic Labs.
Amer. Kloeckner
Amer. Mach. & Foundry
Amer. Meter Co.
Amer. Temp. Indic. Co.
Ampex Corp.
Applied Science Corp.
Arnoux Corp.
Assembly Products
Averbach Electronics
Austin Co.
Authorized Manufacturers
Autom. Control Co
Autom. Electric
Autom. Switch
Autom. Timing & Controls
Automation Corp. of Amer.
Automation Products
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Avion Div.
B-I-F Industries
BJ Electronics
Bailey Meter
Baird-Atomic
Baldwin-Lima-Hamilton
Barber-Colman
Barton Instr.
Beckman Div.
Bell Aircraft
Bendix, Eclipse-Pioneer
Bendix-Pacific
Berkeley Div.
Black, Sivalls, & Bryson
Bogue Elect. Mfg. Co.
Bristol Co.
Bristol Engrg.
Bristol Motor Div.
Brooks Rotameter Co
Brush Electronics
Builders-Providence
B/W Controller Corp
CDC Control Services
Cal-Tronics Corp.
Cardinal Instrumentation
Clark Controller Co.
Clarke Instr. Corp.
Cleveland Controls
Commercial Controls
Control Data Corp
Computer Co. of Amer
Computer Control Co.
ConRay Corp.
Consolidated Avionics
Consol. Electrodynamics
Control Corp.
Control Electronics
Control Specialty Corp
Cook Electric
Cooper Dev. Corp
Curtiss-Wright
Cutler-Hammer
Datascan, Inc.
Datex Corp.
Datran Electronics
Daven Co.
Daystrom Instr
Donner Scientific
Du Mont Labs., Allen B.
Ebert Electronics
Elect. Tachometer Corp.
Electro-Mechanical Res.
Electro-Miniatures Corp.
Electronic Assocs.
Electronic Control Systems
Electronic Engrg. Co.
Engrg. Res. & Devel.
Epsco, Inc.
Farnsworth Electronics
Feedback Electric
Femco, Inc.
Fielden Instr. Div.
Fischer & Porter Co.
Fisher Governor
Fisher Scientific
Ford Instr. Co.
Foxboro Co.
Gap Instr. Co.
General Communication
General Devices Inc.
GE, Apparatus Sales
General Mills
General Precision Lab.
General Regulator
Genzlinger, Inc.
Geotechnical Corp
Giannini & Co., G. M.
Gulton Industries
Gurley, W. & L. E.
H & H Thermostats
Hagan Chem. & Controls
Hall-Scott, Inc.
Hallamore Electronics
Hallikainen Instruments
Hammarlund Mfg.
Hammel-Dahl
Hathaway Instr. Co.
Hays Corp.
Healy-Ruff Co.
Helipot Div.
Hillyer Instr. Co.
Hoover Electronics Co.
Humphrey, Inc.
Hupp Electronics
Hycon Electronics
Hycon Mfg. Co.
Indikon Co.
Indust. Engrg. Corp.
Industrial Gauges
Insco Co.
Inst. Corp. of Fla
Instr. Devel. Labs
Instr. Devel. & Mfg. Corp
Instr. Components, Inc.
Instruments Corp.
Instruments Inc.
Internat. Gauges
Jordan Regulator
Kauke & Co.
Kearfott Co.
Kellogg Switchboard
Kollsman Instr. Corp.
Kybernetes Corp.
L. A. B. Corp.
Landis & Gyr
Larson Instr. Co
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Leeds & Northrup
Lenkurt Electric
Leupold & Stevens
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Loral Electronics
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Magnetic Amplifiers Inc.
Magnetic Instr. Co.
Magnetic Research Corp.
Manning, Maxwell & Moore
Martin-Decker Corp.
Martin-Hubbard Corp.
Mason Electric
Mason-Neilan
Micro Gee Prods., Inc.
Mid-Century Instrumatic
Midwestern Instruments
Milton Roy Co.
Minneapolis-Honeywell
  Boston Div.
  Indust. Div.
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Moore Products
Natl. Aircraft Corp.
Nelson Inst. Co.
Nems-Clarke, Inc.
Norden-Ketay Corp.
North American Insts.
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Norwood Controls
Nuclear Corp. of Amer.
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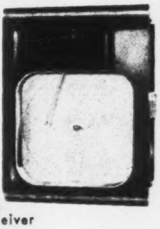
for remote measurement, indicating, recording and automatic control

Bristol's Metameter Telemeters measure pressure, flow, temperature, liquid level, motion and gate position, voltage, current, power, totalized power load, and reactive volt-amperes at remote points from a few feet to many miles away. Very wide choice of transmitting media: carrier channel, telephone, private wires, radio beam (microwave, VHF, and UHF), multiplexing and selective calling—or any convenient circuit you may select. Many electric and electronic instruments (round- and strip-chart) available. Write for Bulletin M1710.



Series 500 Receiver

BRISTOL COMPANY

112 Bristol Rd., Waterbury 20, Conn.

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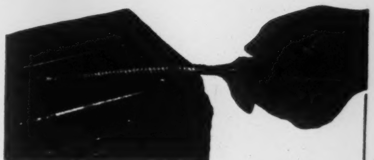

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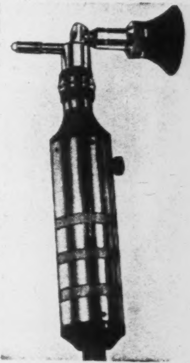
Delivers light where you need it . . . thru a hole, around a corner or in a deep groove. Adjusts to any angle. Slender lamp only 1/8" diameter. 10x Magnifier and right angle mirror attachments.



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Inspect sides and bottoms of blind holes only 1/16" diameter. 5X Magnification at 2" distance shows sharp detail of threads, machining, casting interiors, etc.

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Parsons Co., Ralph M.
Penn Insts. Co.
Phebco, Inc.
Physical Research
Polarad Electronics
Post Machinery Co.
Potter Aeronaut. Corp.
Powers Regulator
Radiation Inc.
Radio Frequency Labs.
Rahm Instruments
Ram Meter, Inc.
Ramo-Wooldridge
Relay Service Co.
Republic Flow Meters
Research Controls
Revere Corp.
Riggs Nucleonics
Rust Industrial Co.
Schaevitz Engrg.
Schuttig & Co.
Scient. Instr. Co.
Scient. Specialties
Servo Corp. of Amer.
Servo-Tek Products
Servomechanisms, Inc.
Shand & Jurs
Shepard Labs.
Sherron Metallic
Simmonds Aerocessories
Simplex Valve & Meter
Soroban Engrg.
Southwestern Indus. Elec.
Sparton Cont. Systems
Sperry Sun Well Survey
Spivey, Inc., James S.
Squires Co.
Statham Labs.
Stavid Engrg., Inc.
Stelma, Inc.
Sterling Prec. Instr. Co.
Stewart Corp.
Streeter-Amet
Summers Gyroscope
Swartwout Co.
Sweets Co., Martin
Systron Corp.
Taber Instr. Corp.
Taller & Cooper
Tech. Material Corp.
Techniflex Corp.
Tele-Dynamics
Telechrome, Inc.
Teleflex, Inc.
Texas Insts., Inc.
Texas Insts., Ind. Div.
Transistor Devices
Transval Engrg. Corp.
Trimount Instr. Co.
Union Switch & Signal
United Engineers
Vapor Recovery Systems Co.
Victory Engrg. Corp.
Viking Instruments
Virginia Electronics
WacLine, Inc.
Warren Mfg. Co.
Webb Co., Jervis C.
Western Gear
Westinghouse Electric
Westronics, Inc.
Wheelco Div.
Wiancko Engrg. Co.
Wilson & Co.
Yardeny Engineering
Zenith Electrical

TELEMETERING SYSTEMS, Pneumatic

Amer. Meter Co.
Applied Science Corp.
Askania Reg. Co.
Autom. Control Co.
Autom. Timing & Controls
Automation Products
B-I-F Industries
Bailey Meter Co.
Bristol Co.
Brooks Rotameter Co.
Builders-Providence
Conoflow Corp.
Cooper Dev. Corp.
Emery Co., A. H.
Farris Engrg. Corp.
Fielden Instr. Div.
Fischer & Porter Co.
Foxboro Co.
Hagan Chem. & Controls
Hallamore Electronics
Haydon Co., A. W.
Hoover Electronics Co.
Leeds & Northrup
Manning, Maxwell & Moore
Mason-Neilan Div.
Milton Roy Co.
Minneapolis-Honeywell Indust. Div.
Moore Products
Penn Instr. Div.
Powers Regulator Co.
Republic Flow Meters
Sangamo Electric
Scient. Instr. Co.
Simplex Valve & Meter Co.
Servo Corp. of America
Sterling Prec. Instr. Corp.
Taller & Cooper
Taylor Instr. Cos.

TELEMETERING SYSTEMS, RF, including Microwave, Radio Remote Control

Adler Electronics
Aerophysics Dev. Corp.
Amer. Mach. & Foundry
Amer. Meter Co.
Applied Science Corp.
Arnoux Corp.
Avion Div.
Bell Aircraft
Bendix-Pacific
Berkeley Div.
B-I-F Industries
Bristol Co.
Collins Radio Co.
Control Data Corp.
Control Electronics
Daven Co.
Daystrom Instrument
Electro-Mechanical Res.
Electronic Communication
Epsco, Inc.
Farnsworth Electronics
Femco, Inc.
Ford Instr. Co.
General Communication
Goodyear Aircraft
Gulton Industries
Hallamore Electronics
Hallicrafters Co.
Hoover Electronics Co.
Kearfott Co.
Lampkin Labs.
LEL, Inc.
Leupold & Stevens
Mid-Century Instrumatic
Natl. Aircraft Corp.
Nems-Clarke, Inc.
North Electric
Northeastern Engrg., Inc.
Nuclear Corp. of Amer.
Parsons Co., Ralph M.
Philco Corp.
Polarad Electronics
Probescope Co.
Radiation Inc.
Radio Frequency Labs.
Ramo-Wooldridge
Rheem Mfg. Co.
Simplex Valve & Meter Co.
Slip Ring Co. of Amer.
Southwestern Indus. Elec.
Sparton Cont. Systems
Spectralab Instrs.
Stavid Engrg., Inc.
Sterling Prec. Instr. Corp.
Sylvania Elec. Prods.
Taller & Cooper
Techniflex Corp.
Telechrome Mfg.
Tele-Dynamics
Texas Insts., Inc.
Transval Engrg. Corp.
United Electrodynamics
United Engineers
WacLine, Inc.
Westinghouse Electric

TELEMETERS, Surveying and Military, Optical

Amer. Mach. & Foundry
Applied Science Corp.
Avion Div.
Bronoptics Co.
Bendix-Pacific
Computer Co. of Amer.
Electro-Mechanical Res.
Farnsworth Electronics
Geotechnical Corp.
Hallamore Electronics
Kollmorgen Optical
Keuffel & Esser
Meyer-Opticraft
Pierce Watch Co.
Stavid Engrg., Inc.
Taller & Cooper
Wild Heerbrugg Insts.

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Ampco Mfg. Co.
Autom. Elect. Co.
Autom. Elect. Sales Corp.
Berkeley Div.
Bradshaw Instruments
Cook Electric
Daven Co.
Dukane Corp.
Electronic Development
Fed. Telephone & Radio
Federal Telegraph Co.
GE
General Electronic
Gray Instr. Co.
Hallamore Electronics
Henschel Corp.
Instrument Laboratories
Intelex Systems
Kellogg Switchboard
Michigan Electronics
North Electric Co.
Remler Co.
Rubicon Co.
Shallcross Mfg. Co.
Sherron Metallic
Sierra Electronic Corp.
Stelma, Inc.
Stromberg-Carlson
Supreme, Inc.
Sure Brothers
Tarc Electronics
Technology Instr. Div.
U. S. Instr. Corp.
Wheeler Electronic Corp.

TELESCOPES, Alignment

Acme Industrial
Align-A-Scope Inc.
Amer. Cystoscope Makers
Amer. Optical
Bray Optical
Bronoptics Co.
Brunson Instr.
Buhl Optical
Bushnell Co., D. P.
Davidson Mfg. Co.
Edmund Scientific
Engis Equipt. Co.
Ercona Corp.
Farrand Optical
Fecker, Inc., J. W.
Gaertner Scientific
Garlynn Engrg. Co.
Gordon Enterprises
Griswold Mfg. Co.
Gurley, W. & L. E.
Helio Instr. Co.
Hirschmann Co., Carl
Internat. Devel. Co.
Keuffel & Esser
Kollmorgen Optical
Lab. Optical Co.
Lenox Instrument Co.
Los Angeles Scient.
Meyer-Opticraft
Nikon, Inc.
Opplem Co., Inc.
Opto-Metric Tools
Optical Serv. & Devel.
Palos Optical
Pan-technics, Ltd.
Penn Optical & Instr.
Perkin-Elmer
Plummer & Kershaw
Rudolph & Sons, O. C.
Scherr Optical Tools
Stratex Instr. Co.
Tinsley Labs.
Unertl Optical
Warren-Knight
White Co., Inc., David
Zeiss, Inc., Carl

TELESCOPES, Astronomical

Amer. Thermo Ware
Askania-Werke A. G.
Bausch & Lomb
Berger & Sons
Bray Optical
Bronoptics Co.
Buchele, W.
Bushnell Co. D. P.
Bushnell Optical
Clark & Sons
Davidson Mfg.
Edmund Scientific
Ercona Corp.
E & W Optical
Esco Products
Fecker, Inc., J. W.
Gaertner Scientific
Gordon Enterprises
Helio Instr. Co.
Henson Co., Fred C.
Internat. Devel. Co.
Kennedy & Co., D. S.
Lab. Optical Co.
Nikon, Inc.
Opplem Co., Inc.
Palos Optical Co.
Pan-technics, Ltd.
Pancro Mirrors, Inc.
Penn Optical & Instr.
Perkin-Elmer
Plummer & Kershaw
Tinsley Labs.
United Scientific
Unertl Optical
White Co.
Zeiss, Inc., Carl
Zoomar Corp.

TELESCOPES, Azimuth and/or Zenith

Align-A-Scope
Amer. Cystoscope Makers
Amer. Thermo Ware
American Optical
Askania-Werke A. G.
Bray Optical
Bronoptics Co.
Brunson Instr.
Bushnell Optical
Clark & Sons
Davidson Mfg. Co.
Edmund Scientific
Ercona Corp.
Esco Products
Fecker, Inc., J. W.
Gaertner Scientific
Garlynn Engrg. Co.
Gurley, W. & L. E.
Gordon Enterprises
Helio Instr. Co.
Internat. Devel. Co.
Kollmorgen Optical
Lab. Optical Co.
Nikon, Inc.
Palos Optical
Pan-technics, Ltd.
Penn Optical & Instr.
Perkin-Elmer
Plummer & Kershaw
Tinsley Labs.
Unertl Optical
Warren-Knight
Warner & Swasey
White Co., David
Zeiss, Inc., Carl

TELESCOPES, Bore and Internal Surface, Inspection

Acme Scientific
Amer. Cystoscope Makers
American Optical
Amer. Instr. Co.
Ames Co., B. C.
Bray Optical
Bronoptics Co.
Buhl Optical
Commercial Optical
Comtor Co.
Eder Instr. Co.
Edmund Scientific
Engis Equipt. Co.
Epic, Inc.
Farrand Optical Co.
Fecker, Inc., J. W.
Federal Products
Gaertner Scientific
Gordon Enterprises
Gurley, W. & L. E.
Helio Instr. Co.
Hirschmann Co., Carl
Internat. Devel. Co.
Jerpbak-Bayless
Kollmorgen Optical
Lab. Optical Co.
Leitz, Inc.
Lenox Instr. Co.
Magnaflux Corp.
Meyer-Opticraft
National Electric
Nikon, Inc.
Opto-Metric Tools
Pan-technics, Ltd.
Perkin-Elmer
Plummer & Kershaw
Scherr Optical Tools
Schneider-Cogswell
Swedish Gage Co.
Testa Mfg. Co.
Tinsley Labs.
Topp Industries, Inc.
Unertl Optical
United Scientific
Welch Allyn, Inc.
White Co., Inc., David
Zeiss, Inc., Carl

TELESCOPES, Laboratory

Align-A-Scope Inc.
Amer. Cystoscope Makers
American Optical
Ann Arbor Instr. Wks.
Askania-Werke A. G.
Bausch & Lomb
Bray Optical
Bronoptics Co.
Buhl Optical
Bushnell Optical
Central Scientific
Davidson Mfg. Co.
Eberbach & Son
Edmund Scientific
Fecker, Inc., J. W.
Gaertner Scientific
Garlynn Engrg. Co.
Gordon Enterprises
Gurley, W. & L. E.
Helio Instr. Co.
Henson Co., Fred C.
Internat. Devel. Co.
Lab. Optical Co.
Los Angeles Scient.
Lynn, Robert M.
Meyer-Opticraft
Opplem Co., Inc.
Optical Ser. & Devel.
Opto-Metric Tools
Palos Optical
Pan-technics, Ltd.
Penn Optical & Instr.
Plummer & Kershaw
Precise Measmts. Corp.
Rudolph & Sons, O. C.
Scherr Co., Inc.
Tinsley Labs.
Unertl Optical
Welch Mfg. Co., W. M.
Zoomar Corp.

TELESCOPES, Reflection and/or Refracting

Alfa Amer. Corp.
Align-A-Scope, Inc.
Amer. Cystoscope Makers
Amer. Optical Co.
Askania-Werke A. G.
Bausch & Lomb
Bray Optical Co.
Bronoptics Co.
Buchele, W.
Bushnell Optical
Clark & Sons
Davidson Mfg. Co.
DuMaurier Co.
E & W Optical Co.
Edmund Scientific
Engis Equipt Co.
Ercona Corp.
Esco Products
Fecker, Inc., J. W.
Fish-Schurman
Gaertner Scientific
Gordon Enterprises
Helio Instr. Co.
Henson Co., Fred C.
Internat. Devel. Co.
Keuffel & Esser
Lab. Optical Co.
Leroy Clausing
Nikon, Inc.
Northrop Anaheim
Opplem Co., Inc.
Palos Optical
Pancro Mirrors, Inc.
Penn Optical & Instr.
Perkin-Elmer
Plummer & Kershaw
Tinsley Labs.
Unertl Optical
United Scientific
Warner & Swasey
Wollensak Optical
Zeiss, Inc., Carl
Zoomar Corp.

TELEVISION, Industrial

Austin Co.
Avion Div.
Berndt-Bach
Blonder-Tongue Labs.
Canoga Corp.
Cardwell Mfg. Corp.
Dage Television Div.
Diamond Power Spec. Corp.
DuBois Engrg. & Mfg.
Du Mont Lab., Allen B.
Eastman Kodak Co.
Farnsworth Electronics
Foto Video Labs.
GE, Electronics Div.
Genl. Prec. Lab.
Hallamore Electronics
Hickok Elect. Instr.
Jacobs Instruments
Jerrold Electronics
Kay Electric
Kin Tel
Kybernetes Corp.
Norden-Ketay
Perkin-Elmer
Philco Corp.
Polarad Electronics
RCA Div.
Spencer-Kennedy Labs.

For Accurate TEMPERATURE RECORDS at MODERATE COST

RANGES AVAILABLE

Temperature-Range	One Rotation of Chart
—30° to +120° F	7 Days
—30° to +120° F	24 Hours
—30° to + 50° F	24 Hours
—20° to + 40° F	24 Hours
—10° to + 50° F	7 Days
—10° to + 50° F	24 Hours
10° to 90° F	24 Hours
30° to 60° F	24 Hours
40° to 100° F	7 Days
40° to 100° F	24 Hours
50° to 130° F	24 Hours
60° to 90° F	24 Hours
60° to 90° F	8 Hours
70° to 130° F	24 Hours
—25° to + 10° C	24 Hours
5° to 40° C	24 Hours

tempscribe

Use TEMPSCRIBE Recorders

BULB-TYPE (illustrated) — *For recording temperatures at a distance*
BI-METAL TYPE — *For recording temperatures in surrounding air*

- ✓ Portable—easily carried. Can be set on flat surface or hung on wall.
- ✓ Spring-wound instrument-type clock; 3 standard movements—8 hours, 24 hours or 7 days.
- ✓ Instrument measures 4½" x 5½" x 7½"; uses 4¼" diameter charts.
- ✓ Chart graduations easy-to-read; spaced uniformly over full range.
- ✓ Pen and its actuating components are in door. Doors are completely interchangeable to convert to any temperature range, or from bi-metal type to bulb-type.

Also available (1) Interchangeable door with electro magnetic armature to record running time of motors, burners, solenoid valves, etc. (2) Two-pen doors for recording temperature and electrical operation on same chart.

Write for Leaflets 786 and 872

BACHARACH INDUSTRIAL INSTRUMENT CO.
200 N. BRADDOCK AVE. • PITTSBURGH 8, PA. T-25

For more information circle **224** on inquiry card.

TEMPERATURE MONITORING SYSTEM

Signals Dangerous Temperatures From Many Points

T-E's Temperature Monitoring System can be located near to or remote from the process area. When temperature exceeds desired, preset limit, danger is indicated by a red light, which remains red until the adverse temperature is corrected, or by an alarm which remains on until a silencing button is pressed.

- **Monitors up to several hundred points in one system**
- **Available with single or multiple set points**
- **Monitors temperatures from −320°F. to +3000°F.**
- **Can also monitor other variables**
- **Functions with thermocouples or resistance bulbs**
- **Signals may be transferred to indicators or recorders**
- **Continuous scanning**

Write for bulletin 72-FF

***Thermo Electric** Co. Inc*
Saddle Brook, New Jersey

In Canada—
Thermo Electric (Canada) Ltd., Brampton, Ont.

For more information circle **319** on inquiry card.

Taller & Cooper
Tarc Electronics
Telechrome
Teletronics Laboratory, Inc.
Thompson Products
Zoomar Corp.

TEMPERATURE ALARM SYSTEMS (see also Monitors)

American-Monarch
Arnoux Corp.
Assembly Products
Astra Tech. & Inst. Corp.
Autom. Contr. Co
Autron Engrg., Inc.
B & H Instr. Co.
B-I-F Industries
Bailey Meter Co.
Barber-Colman Co.
Basic Controls, Inc.
Bendix-Pacific
Blue M Electric
Bristol Co.
Cal Ohm Labs.
Cardinal Instrumentation
Chatham Conts. Corp.
Cleveland Controls
Colortone Electronics
Cooper Co., Clark
Crescent Engrg. & Res. Co
Damol Corp.
Davenport Mfg. Co.
Daystrom Systems
Dyna-Empire, Inc
Edison, Inc., Thomas A
Edwards, L. V.
Electro Devices, Inc.
Electronic Control Corp
Falcon Alarm Co
Farnsworth Electronics
Femco, Inc.
Fenwal, Inc.
Fielden Instr. Div
Fischer & Porter Co
Fulton Sylphon Div.
Gilmore Industries
Gulton Industries
H-B Instr. Co.
Hallikainen Insts.
Henschel Corp.
Illinois Testing Labs
Indikon Co.
Jarco Services
Kaiser Aircraft & Elect.
Kybernetes Corp.
Larson Instrument
Leeds & Northrup
Magnetic Controls
Mercoid Corp.
Minneapolis-Honeywell
  Boston Div
  Indust. Div.
Moeller Instr. Co
North Electric
Norwood Controls
Panellit, Inc.
Partlow Corp.
Photobell Co.
Precision Therm. & Inst.
Rheem Mfg. Co
Ruge Assoc., Arthur C
Sciaco Controls
Seam Inst. Co
Scient. Instr. Co.
Serdex, Inc
Servo Corp. of Amer
Sparton Cont. Systems
Stevens Mfg. Co
Swift & Anderson Inc
Taller & Cooper
Tell-Tronics Prods.
Temp. Engrg. Corp.
Texas Instrs., Inc.
Thermo-Electric Co., Inc.
Thompson-Ramo
Tigerman Engrg. Co
Trerice Co., H. O.
Uhlanet Co., George
Universal Match
Victory Engrg. Corp
Viking Instruments
Warren Mfg. Co
Weksler Instruments
West Instr. Corp.
Wheelco Div
Yellow Springs Instr. Co.

TEMPERATURE BOMBS

Coleman Instr. Co
Greiner, Emil
Precision Scientific
Ruska Instr. Corp.
Shand & Jurs
Vapor Recovery Systems

TEMPERATURE CALIBRATION EQUIPMENT (see also Standards, Temperature, also Baths, Calibration)

Aero Res. Instr. Co.
Aerotech Specialties
Amer. Instr. Co.
Amer. Research Corp
Amthor Testing
Apex Scientific
Astra Tech. & Inst. Corp
B & H Instr. Co.
Bacharach Indust. Instr.
Bristol Co.
Cal Ohm Labs
Consolidated Avionics
Dynamic Research Co.
Electric Hotpack Co.
Ever Ready Thermometer
Farnsworth Electronics
Fielden Instr. Div.
Fisher Research Lab.
G. M. Mfg. Co.
Gray Instr. Co.
Green, Henry J.
Gulton Industries
H-B Instr. Co
Hallikainen Insts.
Harco Labs
Hicatt Engrg. Co
Hergesell & Sons
Hill & Co., E. Vernon
Howell Instr. Co.
Huddleston, J. S. F.
J-B-T Instruments
Kahl Scientific
Kimble Glass Co.
Leeds & Northrup
Lewis Engrg. Co
Manostat Corp.
Minco Products
Minneapolis-Honeywell
  Boston Div.
Modern Lab. Equipt. Co
Moeller Instr. Co.
Nurnberg Thermometer
Palmer Thermometers
Partlow Corp.
Philadelphia Scientific
Pimex, Inc.
Prec. Thermom. & Instr.
Process & Instruments
Pyrometer Instr. Co
Ram Meter, Inc.
Rubicon Instr.
Ruge Assoc., Arthur C.
Std. Electronic Res
Squires Co., C. E.
Taylor Instr. Cos.
Technical Equipt. Co
Technique Assocs.
Temp. Engrg. Corp.
Thermo-Electric Co., Inc.
Thermo Electric Mfg
Thermometer Corp.
Thwing-Albert
Victory Engrg. Corp
Wagner & Son
West Instr. Corp
Weston Instrs
Wheelco Div
Winslow Co
Yellow Springs Instr.

TEMPERATURE CONTROLLERS (see also Temperature Regulators)

AP Control Corp.
Accuracy Scient. Instr
Aero Mfg. Co.
Advanced Insts.
AiResearch Mfg. Co.
Allen-Bradley
Alloy Bellows Engrg. Co.
Amer. Gas Furnace Co.
Amer. Instr. Co.
Apex Scientific
Askania Reg. Co
Askania-Werke, A. G
Assembly Products
Atlas Valve Co
Autom. Timing & Controls
Autron Engrg., Inc.
B & H Instr. Co
Bailey Meter Co.
Barber-Colman
Bar-Ray Products
Barnes Engrg. Co.
Basic Controls Inc.
Bayley Instr. Co
Bell Aircraft Corp.
Bendix-Friez
Betts & Betts
Black, Sivalls & Bryson
Blue M Electric
Boekel & Co
Boiler Room Equipt
Braun Corp.
Bristol Co.
Burling Instr. Co.
CDC Control Services
Canton Instr. Co.
Cardinal Instrumentation
Carlingo Commodities
Cash Co., A. W.
Century Instr. Co
Chatham Conts. Corp.
Clifford Mfg. Co
Commercial Research
Cook Electric Co
Cooper Co., Clark
Cuthbert Co., Inc.
Cutler-Hammer
Cybertronic Corp.
Dahl Co., Inc., G. W.
Davenport Mfg. Co
Dickson Co
Douglass Automatic
E-T-A Products
Ebert Electronics
Eclipse Fuel Engrg. Co
Edison Electcl. Controls
Edison Inc., Thomas A.
Electric Hotpack Co.
Electrimatic Corp.
Electro Medical Lab
Electro-Tech. Equipt.
Electronic Products
Electronics Corp. of Amer.
Elgin Natl. Watch
Emerson Apparatus Co
Engelhard, Chas.
Farnsworth Electronics
Farris-Stacon
Fenwal, Inc.
Ferner Co.
Fielden Instr. Div
Fischer & Porter Co
Fisher Scientific
Fish-Schurman
Foster Engrg. Co
Fox Valley Instr.
Foxboro Co
Fulton-Sylphon Div
G-M Labs.
G-V Controls Inc
General Controls Co.
GE, Apparatus Sales
Genl. Regulator Corp
Gleason Avery, Inc
Gordan Co., Claud S.
Gotham Instr. Div.
Greiner, Emil
H-B Instr. Co
H-H Thermostats
Hagan Chem. & Controls
Hallikainen Insts.
Hammel-Dahl
Hart Mfg. Co.
Hays Corp.
Huppert Co., K. H
Illinois Testing Labs
Industrial Control Panel
Indust. Engrg. Corp.
Instrument Rep. & Mfg
Jaidinger Mfg. Co.
Jelrus Co
Johnson Service Co
Jordan Corp.
Jordan Reg. Co.
Kaye & MacDonald
Keckley Co.
Kessler Co.
Kieley & Mueller
Klipfel Valve Div.
Larson Instr. Co.
Leeds & Northrup
Leslie Co.
Lewis-Engrg. Co.
London Insts. Div
Magnetic Controls
Magnetic Instr. Co
Manning, Maxwell & Moore
Marsh Corp.
Mason Instr. Co.
Mason-Neilan Div
McAlear Mfg. Co
Mercoid Corp.
Minn-Honeywell Boston
Minneapolis-Honeywell
  Indust. Div.
Modern Lab. Equipt. Co
Moeller Instr. Co.
Moisture Register Co
Moore Products
National Controls
Neutronics Research
Olympic Devel. Co.
Orban Co., Kurt
Partlow Corp.
Penn Insts. Div.
Perfex Controls Div
Perfex Corp.
Phen-Trols Inc.
Phila. Thermometer Co
Phoenix Prec. Instr.
Pimex, Inc.
Powers Reg. Co
Precision Scientific
Precision Thermom
Preferred Utilities
Pyrometer Instr. Co
Pyrometer Service Co
Rascher & Betzold
Refinery Supply Co.
Republic Flow Meters
Research, Inc
Research Controls
Revere Corp.
Rheem Mfg. Co
Robertshaw-Fulton
Robinette Co., W. C
Rochester Mfg. Co
Rockwell Engrg. Co.
Rubicon Co
Sarco Co
Scaico Controls
Scientific Glass App.
Scientific Instr. Co
Security Valve Corp
Seely Instr. Co.
Serdex, Inc
Servo Corp. of Amer
Soreng Products
Spence Engrg. Co
Spencer Thermostat Div
Squires Co., C. E.
Std. Electronic Res
Sterling Inc.
Stevens Mfg. Co
Struthers-Dunn
Swartwout Co.
Swieco Inc.
Taylor Instr. Cos.
Technical Equipment
Tell-Tronics Prods
Temp. Engrg. Corp
Tensitron, Inc.
Thermo-Electric Co.
Thermo Electric Mfg. Co.
Termometer Corp.
Thwing—Albert
Tipp-Tronic, Inc.
Trerice Co
Tuttle & Kift, Inc
Uehling Instr. Co
Uhlanet Co.
United Control Corp.
United Electric Controls
United Optical Mfg
U. S. Gauge Div.
Universal Match
Valverde Labs.
VecTrol Engrg., Inc
Victory Engrg.
Viking Instruments
Watts Reg. Co.
Weksler Instrs
West Instr. Corp.
Weston Instrs.
Westronics, Inc.
Wheelco Instr. Div.
White Mfg. Co.
White-Rodgers
Yellow Springs Instr. Co.

TEMPERATURE INSTRUMENTS, see Thermometers, also Pyrometers

TEMPERATURE REGULATORS, Self Operated

Advanced Insts.
AiResearch Mfg. Co.
Amer. Instr. Co.
Apex Scientific
Askania-Werke, A. G
Assembly Products
Atlas Valve Co.
Autron Engrg., Inc
Bar-Ray Prods.
Basic Controls, Inc
Bayley Instr. Co
Blue M Electric
Bristol Co.

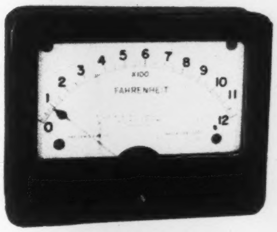
When Using This Guide look under the variable, e.g., Pressure Gages (not Gages, Pressure); or look under the noun—Magnets, Permanent (not Permanent Magnets).

LEWIS

AUTOMOTIVE AND INDUSTRIAL TEMPERATURE MEASURING EQUIPMENT

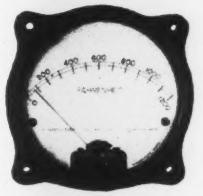
Sturdy Dependable Indicators —Suitable For Use In Moving Vehicles or For Permanent Installation

This instrument has been used extensively by the leading motor-car manufacturers for road testing on the "Proving Grounds" — where performance counts. Housed in a rectangular bakelite case, this reliable, fully compensated pyrometer is furnished with 6 in. hand drawn scales for greater accuracy. The Model 58PY is available for use with all standard thermocouple materials, in many ranges to suit the most exacting application.



MODEL 58PY

Manufactured with the same type of movement as our aircraft pyrometers, the Model 23B pyrometer is well suited for use in moving vehicles and has been successfully used in many marine diesel installations for measuring exhaust temperatures. It is housed in a 4 in. round bakelite case that is flanged for panel mounting, and is available in several ranges for use with various thermocouple materials.



MODEL 23B

The Model 20B series of indicators are patterned after our standard aircraft instruments and are supplied with 3" round steel cases suitable for panel installation. These compact, sturdy indicators have 2⅛ in. scales, are fully cold-end compensated and are available in many ranges for use with various thermocouple materials.

FAHRENHEIT
0
1
2
3
4
5
6

MODEL 20B

The Model 62RT4F resistance thermometer is a sturdy easy-to-read instrument with a 6 in. hand drawn scale. It is suitable for use in moving vehicles and is excellent for flight-test work. It is operated by an ordinary dry cell and is calibrated to standard "AN" bulb curves for various ranges in fahrenheit or centigrade.

MODEL 62RT4

THERMOCOUPLES for use with the above indicators are available in many styles for special applications. We have developed a complete line of aircraft, industrial and automotive thermocouples and would be pleased to offer our recommendation for your application.

THERMOCOUPLE LEAD WIRE for connecting thermocouples to the indicators is manufactured in iron-constantan, copper-constantan or chromel-alumel material with standard and special insulation. Use Lewis lead-wire with Lewis instruments and thermocouples for best results.

RESISTANCE BULBS for use as sensing elements for the 62RT4 thermometers are available in several types for various applications, for measuring free air or liquid temperatures. We invite inquiries on your application.

THE LEWIS ENGINEERING CO.

Specialists in Electrical Temperature Measurements

NAUGATUCK, CONNECTICUT

For more information circle **320** on inquiry card.

Scott Testers manufactures a complete line of

PHYSICAL TESTING EQUIPMENT

Contact us regarding your needs for—

- ☐ TENSILE & HYSTERESIS TESTS up to 2,000 lbs.
- ☐ HIGH-TEMPERATURE DETERIORATION TESTS (1,000°F).
- ☐ LOW-TEMPERATURE BRITTLENESS TESTS (−80°C).
- ☐ FLEXING & COMPRESSION TESTS
- ☐ TEAR & SEAM TESTS
- ☐ ADHESION (LAMINATION) TESTS
- ☐ MOONEY VISCOSITY TESTS
- ☐ INTERNAL BOND TESTS

Your Testing Problem Is Our Business

Over 58 years solving problems of physical testing.

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*Trademark

SCOTT TESTERS, INC.

45 Blackstone St. Providence, R. I.

For more information circle **321** on inquiry card.

Cardinal Instrumentation
Chatham Conts. Corp.
Cooper Co., Clark
Davenport Mfg. Co.
Douglas Automatic
Eclipse Fuel Engrg. Co.
Fenwal, Inc.
Fielden Instr. Div.
Fischer & Porter
Foster Engrg. Co
Fulton Sylphon Div.
General Controls Co.
Greiner, Emil
H-B Instr. Co.
Hoffman Specialty Mfg.
Huppert Co.
Johnson Service Co.
Jordan Corp. Div.
Kaye & MacDonald
Keckley Co.
Klipfel Valves
Larson Instrument
Leslie Co.
Magnetic Research Corp.
Manning, Maxwell & Moore
Marsh Corp., Jas. P.
McAlear Mfg. Co.
Minneapolis-Honeywell
  Indust. Div.
Modern Lab. Equipt. Co.
Moeller Instr. Co.
Neutronics Research
Partlow Corp.
Pimex, Inc.
Powers Reg. Co.
Pyrometer Instr. Co.
Research, Inc.
Robertshaw-Fulton
Sarco Co.
Scient. Instr. Co.
Spence Engrg. Co.
Spencer Thermostat Div.
Squires Co., C. E.
Std. Electronic Res.
Stratos Div.
Taylor Instr. Cos.
Tell-Tronics Prods.
Thermo-Electric Co.
Tipp-Tronic, Inc.
Trerice Co.
United Control Corp.
United Electric Controls
Victory Engrg. Corp.
Warren Engrg. Co.
Watts Reg. Co.
West Instr.
Weston Instrs.
Yellow Springs Instr. Co.

TEMPERATURE SENSITIVE PAINT and CRAYONS

Electro-Tech Equip.
Gordon Co., Claud S.
Tempil Corp.
Tanney Engrg. Co.

TEMPERATURE STANDARDS, see Standards, Temperature

TEMPERATURE TRANSMITTERS, Electrical Output

Arnoux Corp.
Askania-Werke, A. G.
Assembly Products
Astra Tech. Inst. Corp.
Autron Engrg., Inc.
B-I-F Industries
Bailey Meter Co.
Barber-Colman
Bendix, Friez Instr. Div.
Bendix-Pacific
Bristol Co.
Cal-Ohm Labs.
Cardinal Instrumentation
Cleveland Controls, Inc.
Davenport Mfg. Co.
Edison, Inc., Thomas A.
Fielden Instr. Div.
Fischer & Porter Co.
GE, Apparatus Sales
Giannini & Co., G. M.
Hagan Chem. & Controls
Hays Corp.
Instrs. Corp.
Jarco Services
Leed & Northrup
Lewis Engrg. Co.
Manning, Maxwell & Moore
Minco Products
Norwood Controls
Partlow Corp.
Penn Insts. Div.
Revere Corp. of Amer.
Rheem Mfg. Co.
Ruge Assocs., Arthur C.
Scientific Instr. Co.
Shand & Jurs
Swartwout Co.
Taylor Instr. Cos.
Theromo-Electric
Trans-Sonics, Inc.
United Control Corp.
Vapor Recovery Sys. Co.
VecTrol Engrg., Inc.
Yellow Spring Inst. Co.

TEMPERATURE TRANSMITTERS, Pneumatic Output

Askania-Werke, A. G.
B-I-F Industries
Bailey Meter Co.
Black, Sivalls & Bryson
Bristol Co.
Burling Instr. Co.
Cash Co., A. W.
Consolidated Controls Corp.
Fischer & Porter Co.
Foxboro Co.
Fulton Sylphon Div.
Hagan Chem. & Controls
Johnson Service Co.
Leeds & Northrup
Leslie Co.
Manning, Maxwell & Moore
Mason-Neilan
Minneapolis-Honeywell
  Indust. Div.
Moore Products
Partlow Corp.
Penn Insts. Div.
Powers Reg. Co.
Pyrometer Instr. Co.
Republic Flow Meters
Research Controls
Scientific Instr. Co.
Taylor Instr. Cos.
U. S. Gauge Div.

TENDERNESS TESTERS, see Softness Testers

TENSILE TEST MACHINES, see Testing Machines

TENSIOMETERS (See also Surface Tension)

Baldwin-Lima-Hamilton
Boulin Instr. Corp.
Brush Instruments
Central Scientific
Chatillon & Sons
Custom Scientific Insts.
Dillon & Co., W. C.
Eltzen Co., Louis C.
Emery Co., A. H.
Federal Products
GE
Georator Corp.
Gilmore Industries
Instr. Devel. & Mfg. Corp.
Kushner, Joseph B.
Martin-Decker Corp.
Metron Instr. Co.
Millers Falls
Olsen Testing Machine
Pacific Scientific Co.
Rutico, Inc.
Saxl Instr. Co.
Schaevitz Engineering
Statham Labs.
Superdraulic Corp.
Suter, Alfred
Telechrome, Inc.
Tensitron, Inc.
Testing Machines, Inc.
Thwing-Albert
Toledo Scale Co.
WacLine, Inc.
Westronics, Inc.

TENSION INDICATORS (see also Textile Test Instruments)

Allied Products Div.
Ann Arbor Instr. Works
Askania Werke, A. G.
Baldwin-Lima-Hamilton
Boulin Instr. Co.
Brush Instruments
Chatillon & Sons
Daystrom Instrument
Daytronic Corp.
Dillon Co., W. C.
Dynametrics Corp.
Eitzen Co., Louis C.
Emery Co., A. H.
Exact Weight Scale Co
Federal Products
GE
Georator Corp.
Gilmore Industries
Imtra Corp.
Jo-Line Tools
Martin-Decker Corp.
Olsen Testing Mach.
Pacific Scientific
Precision Scientific
Saxl Instr. Co.
Seederer-Kohlbusch
Streeter-Amet
Thwing-Albert
Tensitron, Inc.
Wiancko Engrg. Co

TERMINAL BLOCKS

AMP, Inc.
Aerovox Corp.
Aerolite Electronics
Akron Porcelain Co
Alden Products
Allen-Bradley Co.
Amer. Electronic Prods.
Ampco Mfg. Co.
Amphenol Electronics
Armel Electronics
Auto. Electric Sales
Autom. Electric
Brit. Electronic Sales
Buchanan Electcl. Prods
Burndy Engrg. Co.
Cambridge Thermionic
Cinch Mfg. Co.
Cinema Engrg. Co.
Cleveland Metal Specs.
Collectron Corp.
Continental Connector
Continental-Diamond Fibre
Cook Electric
Curtis Devel. & Mfg. Co
Cutler-Hammer
Dimco-Gray
Eastern Specialty Co.
Electric Tachometer Corp.
Electronic Mechanics
Excellex Electronics
Federal Screw Prods. Co
Ford Instr. Div.
GE Apparatus Sales
Garde Mfg. Co.
Graphik Circuits, Div.
Grayhill
Grigoleit Co.
Helipot Div.
Hermaseal Co.
Jones Div. Howard B.
Kulka Electric
Lab-Tronics
Lenkurt Electric
Lerco Electronics
Litton Industries
Lynn Electronic Res.
Millen Mfg. Co.
Miller Dial & Name Plate
Molded Insulation Co.
North Electric
Precision-Made Prods.
Reeves Instr. Corp.
Reiner Electronics
Richardson Co.
Ritchie & Co.
Rogan Brothers
Smith, Inc., Herman H.
Spaulding Fibre Co.
States Co.
Steatite Div.
Stokes Molded Prods.
Stromberg-Carlson
Stupakoff Div.
Suffolk Prods. Co
Superior Steatite
Torwico Electronics
U. S. Gasket Co.
U. S. Instr. Corp.
Waterbury Co's.
Westinghouse Electric

TERMINAL BOARDS

Adlings, Inc.
Aerolite Electronics
Aerovox Corp.
Aircraft Radio Corp.
Alden Products
Amer. Lava Corp.
Ampco Mfg. Co.
Amphenol Electronics
Ark-Les Switch Corp.
Armel Electa.
Atlas E-E Corp.
B/W Controller
Buchanan Electcl. Prods.
Cambridge Thermionic
Cinch Mfg. Co.
Circon Component
Collectron Corp.
Continental Connector
Continental Diamond-Fibre
Cook Electric
Corning Glass Works
Curtis Devel. & Mfg. Co
Dimco-Gray
Electronic Mechanics
Excellex Electronics
Federal Screw Prod. Inc.
Formica Co.
GE, Apparatus Sales
Garde Mfg. Co.
Globe Electrical Mfg.
Graphik Circuits, Div.
Helipot Corp.
Indust. Hrdw. Mfg. Co.
Instrument Tool & Engrg.
Jones Div., Howard B.
Kulka Electric
Lab-Tronics

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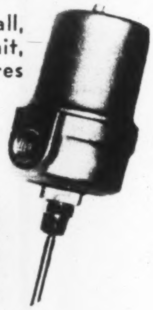
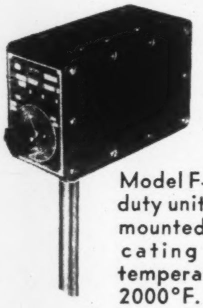


Model B-1C Small, lightweight unit, for temperatures under 800°F.



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Burling Controls for electric and pneumatic systems operate through the variation in the expansion of different solids up to 2000°F, making possible long and "trouble-free" installations. Operating differentials as close as ±1/4° may be maintained.

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• Compression • Puncture • Universal
• Folding • Tension
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For more information circle 323 on inquiry card.

Lamtex Industries
Lerco Electronics
Leeds & Northrup
Litton Ind.
Mica Insulator
Millen Mfg. Co
Miller Dial & Name Plate
Molex Prod Co
Molded Insulation
Natl. Vulcanized Fibre
Newark Electric Co.
North Electric
Pax Electronics
Photo Chemical Prods
Reeves Instr. Corp.
Reiner Electronics
Remler Co.
Richardson Co.
Sealectric Switch & Relay
Sealtron Corp.
Smith, Inc., Herman H.
Spaulding Fibre Co
States Co.
Steatite Div.
Suffolk Prods. Co
Sylvania Electric Prods
Torwico Electronics
Tri-Dex Electronics
U. S. Engrg. Co
U. S. Gasket
Vector Electronic
Viking Industries
Virginia Electronics

TERMINAL STRIPS

AMP, Inc.
Adlings, Inc.
Aerolite Electronics
Aerovox Corp.
Aircraft Radio Corp.
Allen-Bradley Co
American Lava Corp.
Ampco Mfg. Co.
Amphenol Electronics
Ark-Les Switch Corp
Armel Electronics
Auto. Electric Sales
Autom. Electric
Birnbach Radio Co
Buchanan Electcl. Prods
Burndy Corp.
Cambridge Thermionic
Cannon Electric
Cinch Mfg. Co.
Circon Component
Coaxial Connector Co
Collectron Corp.
Continental-Diamond
Cook Electric
Curtis Devel. & Mfg. Co
Electronic Mechanics
Excellex Electronics
Federal Screw Prods.
Garde Mfg. Co.
GE
Globe Electrical Mfg.
Graphik Circuits, Div.
Indust. Hrdw. **Mfg. Co.**
Jones Div., **Howard B.**
Kulka Electric
Lab-Tronics
Lamtex Industries
Leeds & Northrup
Lerco Electronics
Mica Insulator
Millen Mfg. Co.
Miller Dial & Name Plate
Molex Prod. Co.
Natl. Aircraft Corp
Natl. Vulcanized Fibre
Newark Electric Co.
North Electric
Pax Electronics
Reeves Instr. Corp.
Reiner Electronics
Remler Co.
Richardson Co.
Sangamo Electric
Seton Name Plate
Silicone Seals, Inc.
Smith, Inc., Herman H.
Spaulding Fibre Co.
States Co.
Steatite Div.
Stromberg-Carlson
Suffolk Prods. Co.
Sylvania Electric Prods.
Torwico Electronics
Tri-Dex Electronics
U. S. Engrg. Co.
U. S. Instr. Corp.

U. S. Gasket
Vector Electronic
Viking Industries
Virginia Electronics
Waldom Electronics
Waterbury Co's.
Westline Prods. Co.
Westinghouse Electric

TERMINALS

AMP, Inc.
Adlings, Inc.
Aerolite Electronics
Alden Products
American Brass Co.
American Lava Corp.
Ampco Mfg. Co.
Ark-Les Switch Corp.
Armel Electronics
Atlas E-E Corp.
Bead Chain **Mfg. Co.**
Birnbach Radio Co.
Brit. Electronics Sales
Buchanan Electcl. Prods.
Burndy Engrg. Co.
Cambridge Thermionic
Cinch Mfg. Co.
Cinema Engrg. Co.
Circon Component Co.
Coaxial Connector Co.
Collectron Corp.
Constantin & Co., L. L.
Continental Connector
Cook Electric
Couch Ordnance, Inc.
Creative Plastics Corp.
Dimco-Gray Co.
DuMont Labs., Allen B.
Eastern Specialty Co.
Eby, Inc., Hugh H.
Electric Auto-Lite Co.
Excellex Electronics
Federal Screw Prods.
Garde **Mfg. Co.**
Gen. Ceramics & Steatite
Goe **Engrg. Co.**
Grayhill
Howard Clock Prods.
Indust. Hrdw. Mfg. Co.
Kulka Electric Mfg.
Lab-Tronics
Lerco Electronics
Littlefuse, Inc.
Litton Ind.
Microdot, Inc.
Millen Mfg. Co.
Molex Prod. Co.
North Electric
Panduit Corp.
Remler Co.
Res. Dev. **Manufacture**
Revere Corp. of **Amer.**
Sealectric **Switch & Relay**
Sealtron Corp.
Shakeproof Div.
Smith, Inc., **Herman H.**
States Co.
Steatite Div.
Stupakoff Div.
Taurus Corp.
Technical Soldering Co.
Thermal Materials
Thomas & Betts
Thor Ceramics, Inc.
Torwico Electronics
Triad Transformer
U. **S. Gasket Co.**
Vaco Products
Vector Electronic
Waldom Electronics
Winchester Electronics

TERMINALS, Hermetic

Amer. Lava Corp
Biggs Co., Carl H.
Buchanan Elec. Pro. Corp.
Burndy Engrg. Co.
Centralab
Ceramaseal Co
Ceramatronics, Inc.
Clifford Mfg. Co.
L. L. Constantin & Co
Durakool, Inc.
Electrical Industries
Electronic Mechanics
Farnsworth Electronics
Fish-Schurman
Fusite Corp.
Garde **Mfg. Co.**
General Ceramics
Genl. Hermetic Sealing
Glass **Engrg.** Co.

Glass-Solder Engineering
Glass-Tite Indust.
Hermaseal Co.
Hermetic Sealed Prods.
International Resistance Co
Lab-Tronics
Litton Industries
Microdot, Inc.
Phaostron Corp
Potter & Brumfield
Radiation Counter Labs
Regal Instr. Co
Sealtron Corp.
Specialties, Inc.
Steatite Div.
Stupakoff Div.
Sylvania Electric Prods
Tech. Soldering Co.
Thermo **Materials, Inc.**
Thor Ceramics, Inc.
Tinnerman Prods.
Torwico Electronics
Triad Transformers Corp.
U. S. Gasket
U. S. Stoneware Co.
Winslow Co., Inc.

TEST BLOCKS

Aerolite Electrs.
Brown & Sharpe
Buchanan Electcl. Prods
Clarke Instr. Inc.
Detroit Testing Mach.
Eastern Spec. Co.
Eitzen Co., Louis C.
Fish-Schurman
Fonda Gage Co.
GE. Apparatus Sales
Gordon Co., Claud S.
Kent Cliff Labs. Div.
King Tester Corp.
Olsen Testing Mach.
Scherr Co., Inc.
States Co.
Steel City Testing Mach
Testing Machines, Inc.
Torsion Balance Co.
Van Keuren Co.
Wilson Mech. Instr. Div.

TEST BLOCKS, Textile, see Textile Test Instruments

TEST CHAMBERS, see Environmental Test Chambers

TEST SETS, Diode, see Diode Test Sets

TEST STANDS, Propeller see Propeller

TEST WEIGHTS, see Weights, Avoirdupois Metric or Troy

TESTERS, see the Object of Test, e.g. Abrasion Testers, Asphalt Testers, Battery Testers, Circuit Testers, Coil Testers Flash Point Testers

TESTERS, Air Speed Indicators, see Aircraft Instrument Testers

TESTERS, Altimeters, see Aircraft Instrument Testers

TESTERS, Condenser, see Capacitance Indicators (Electrical) or Boiler Room Instruments (Process)

TESTERS, Dead Weight see Pressure Instrument Calibrators, Dead Weight

TESTERS, Dew Point, see Humidity Instruments

TESTERS, Fuel, see Gas Analyzers, Coal Testers, etc.

TESTERS, Hydrogen-Ion, see pH

TESTERS, Moisture, see Moisture, also Environmental Test

TESTERS, Mullen, see Bursting Testers

TESTERS, Non-destructive, Electrical, for Physical Properties

Aero Electronics
Amer. Instr. Co.
Applied Research Labs.
Associated Research
Baldwin-Lima-Hamilton
Berkshire Labs.
Boonton Radio
Branson Insts. Inc.
Bristol Co.
Brush Insts.
CDC Control Services
Cady & Co
Consol. Electrodynamics
Control Devices
Custom Scient. Insts.
Davenport **Mfg. Co.**
Dice Co., J. W.
Dit-Mco. Inc.
DuBois Engrg. & Mfg.
Eder Instr. Co.
Electro Devices (St. Louis)
Electro Instr. Inc.
Electro-Mechanical Dev. Co
Electro Products Labs.
Ferner Co.
GE. Apparatus **Sales**
General Radio
Genisco Inc.
Hamner Electronics
Hathaway Instr. Co.
Heiland Div.
Hewson Co.
Isotope Products
Kinetic Instr. Co.
Magnaflux Corp.
Magnatran Inc.
Marion Electl. Instr.
Magnetic Analysis Corp.
Metrol Inc.
Minco Products
Nuclear Research
Opad Electric
Optimized Devices
Peschel Electronics
Ram Meter, Inc.
Ramo-Wooldridge
Ramsey **Engrg. Co.**
Robertshaw-Fulton
Sheffield Corp.
Simpson Electric
Slaughter Co.
Sperry Products
Starid Engrg., Inc.
Sunshine Scientific
Sweets Co., Martin
Testing Machines, Inc.
Thwing-Albert
Tri-Tronics Co.
Triplett Electcl. Instr.
U. S. Testing Co.
Veeco Vacuum Corp.
Vibro-Ceramics

TESTERS, Oxygen, see Gas Analyzers

TESTERS, Piston Ring, see Dimensional Gages

TESTERS, Radio Set, see Circuit Analyzers

TESTERS, Radio Tube, see Tube Testers, Electron

TESTING INSTRUMENTS, Optical, see Optical Testing Instruments

TESTING MACHINES (UNIVERSAL) CALIBRATORS, Including Proving Rings

Amer. Instr. Co.
Baldwin-Lima-Hamilton
Buehler, Ltd.
Bush **Assoc., G. F.**
Custom Scient. Insts.
Daytronic Corp.
Emery Co., A. H.
Gates Electronic Co.
Genisco Inc.
Gilmore Industries
Gordon Co., Claud S.
Morehouse Mach. Co.
Olsen Testing Machine
Optimized Devices
Pittsburgh Inst. & Mach.
Rainhart Co.
Soiltest, Inc.
Steel City Testing Machs.
Testing Machines Inc.
Thompson Ramo
Thwing-Albert

TESTING MACHINES, Bursting, see Bursting Testing Machines

TESTING MACHINES, Fatigue, see Fatigue

TESTING MACHINES, Glass Strain, see Glass Test

TESTING MACHINES, Gummed Tape, Paper, see Paper Test

TESTING MACHINES, High Pressure, see Bursting Testing Machines

TESTING MACHINES, Knit Goods, see Textile Testing

TESTING MACHINES, Leather, see Leather Testing

TESTING MACHINES, Miscellaneous, including Alternating Stress, Bending, Compression, Creep, Deflection, Ductility, Impact, Pendulum, Stiffness and Bending, Stretch, etc. (see also Testing Machines, Universal)

Airdraulics Engrg. Co.
All American Tool & Mfg.
Allegany Instr. Co.
Alpha Molykote
Amer. Instr. Co.
American Research
Ames Prec. Machine
Amthor Testing
Analysis Sales
Ann Arbor Instr. Wks
Asch Equipment Co
Associated Testing Labs.
Bachcarach Indust. Instr.
Baldwin-Lima-Hamilton
Black & Decker
Bock Machine Co.
Boulin Instr. Corp.
Branson Instruments
Brush Assocs., G. F.
Brush Insts.
Buehler, Ltd.
Cambridge Instr. Co.
Carver, Fred S.
Central Scientific
Chapman Labs.
Chatillon & Sons
Clark Instrument Inc.
Consol. Electrodynamics
Control Devices
Custom Scient. Insts.
Detroit Testing Mach. **Co.**
Dietert Co.
Dillon & Co., W. C.
Dommers Co.
Dorr-Patterson Engrg. Co.
Edin Electronics
Edwards, L. V.
Electro Products Labs.
Emery Co., A. H.
Engrg. & Research Corp.
Engineers Specialty Div.
Exact Weight Scale Co
Fecker, Inc., J. W.
Ferner Co.
Gadgets Inc.
Gaertner Scientific
Gardner Lab.
GE
Genisco Inc.
Geotechnical Corp.
Gordon Co., Claud S.
Gorrell & Gorrell
Gurley, W. & L. E.
Hacker & Co., W. J.
Hathaway Instr. Co.
Hayes Scient. App.
Heiland Div.
Hesse-Eastern
Hevi-Duty Electric
Humboldt **Mfg. Co.**
Hunter Spring
Impact-O-Graph Corp.
Impact Register Co.
Impactograph Corp.
Industrial Engrg. Co.
Insco Co.
Instron Engrg. Corp.
Internat. Res. & Dev.
Jan Hardware Mfg. Co.
Kahn & Co.
King Tester Corp.
Krouse Testing Machine
L. A. B. Corp.
Lessels & Assocs.
Link Engrg. Co.
M. B. Mfg. Co.
Magnavox Co.
Mantec, Inc.
Marshall Co., L. H.
Martin-Hubbard Corp
Mast Devel.
Matisa Equipment
Maxson Instr. Div.
Metrolog Corp.
Metron Instr. Co.
Multi-Amp Corp
Olsen Testing Machine
Opplem Co., Inc.
Pacific Scientific
Pacific Transducers
Pelouze Mfg. Co.
Perkins & Son
Pittsburgh Instr. & Mach.
Potter Co.
Precision Scientific
R.C.A. Manufacturing
Radio Frequency Labs.
Rainhart Co.
Riehle Testing Machine
Schauer Mfg. Co
Scientific Instr. Co.
Scott Testers, Inc.
Shasta Div.
Size Control Co.
Soiltest, Inc.
Steel City Testing Machs.
Sturtevant Co.
Sun Electric
Suter, Alfred
Sweets Co., Martin
Tabor Instr. Corp.
Taller & Cooper, Inc.
Tatnall Meas. Systems
Testing Machines, Inc
Thwing-Albert
Toledo Scale Co.
Triner Scale & Mfg.
Truck Scale & Res.
U. S. Testing Co.
Universal Aviation
Vectron, Inc.
Wabash Metal Prods
Whittington Pump

TESTING MACHINES, Paper, see Paper Testing

TESTING MACHINES, Pipe and Tube, see Pipe and Tube Testing Machines

TESTING MACHINES, Universal, Dead Weight Beam

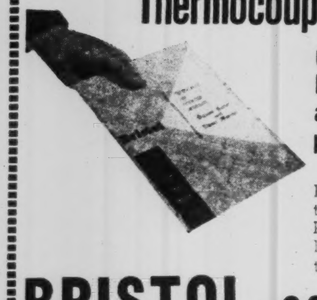
Ann Arbor Instr. Wks.
Baldwin-Lima-Hamilton
Dietert Co.
Dillon & Co., W. C.
Ferner Co.
Gordon Co., Claud S.
Hacker & Co.
Ideal-Aerosmith
Jan Hardware Mfg. Co.
Olsen Testing Machine
Riehle Testing Machines
Scott Testers, Inc.
Taller & Cooper
Tatnall Meas. Systems
Testing Machines, Inc.
Thwing-Albert
Trerice Co., H. O.
Triner Scale & Mfg.

TESTING MACHINES, Universal, Hydraulic

Ann Arbor Instr. Works
Auto Control Labs.
Baldwin-Lima-Hamilton
Con Ray Corp.
Consolidated **Avionics**
Detroit Testing Mach.
Dietert Co., Harry W.
Eitzen Co., Louis C.
Electro Products Labs.
Emery Co., A. H.
Ferner Co.
Gordon Co., Claud S.
Hacker & Co.
Indust. Engrg. Corp.
Kahn & Co., Inc.
King Tester Corp.
Nankervis Co.
Olsen Testing Mach.
Pacific Scientific
Pasadena Hydraulics, Inc.
Pittsburgh Instr. & Mach.
Riehle Testing Machines
Soiltest, Inc.
Steel City Testing Mach.
Sun Electric Corp.
Superdraulic Corp.
Tatnall Meas. Systems
Testing Machines, Inc.
Thwing-Albert
Truck Scale & Res.
United Mfg. Co. Div.
Vectron, Inc.
Wabash Metal Prods.
Wroble Engrg. Co.

TESTING MACHINES, Universal, Spring Dynamometer

Ann Arbor Instr. Wks.
Baldwin-Lima-Hamilton
Buehler, Ltd.
Chatillon & Sons
Dietert Co.
Dillon & Co., W. C.
Dorr-Patterson Engrg.
Ferner Co.
Gordon Co., Claud S.
Hacker & Co.
Hayes Scientific App.
Industrial Electronics
Industrial Engrg. Co.
Krouse Testing Mach.
Link Engrg. Co.
Olsen Testing Mach.
Pacific Scientific
Riehle Testing Machines
Scott Testers, Inc.
Seederer-Kohlbusch
Stoelting Co., C. H.
Testing Machines, Inc.
Thwing-Albert
Toledo Scale Co.
Triner Scale & Mfg.
United Mfg. Co. Div.
Webb Co., Jervis B.



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TESTING MACHINES, Vibration, see Vibration

TESTING MACHINES, Wire, see Wire Testing Machines

TESTING SETS, see the Object of Measurement and Test

TESTING SETS, Automotive, see Engine Test

TESTING SETS, Electrical, see Circuit Testers

TESTING SETS, Meters, Electrical, see Electrical Instrument Calibrators

TESTING SETS, Water, see Water Analysis

TEXTILE TEST INSTRUMENTS and MACHINES

Admittance-Namco
Amer. Instr. Co.
Amthor Testing
Anderson Machine Shops
Ann Arbor Instr. Co.
Atlas Elect. Devices Co.
Baldwin-Lima-Hamilton
Boulin Instr. Corp.
Brabender Instrs.
Brush Insts.
Bush Assocs., G. F.
Cambridge Instr. Co.
Chatillon & Son
Custom Scientific Insts.
Defiance Engrg. & Micrwv.
Dillon & Co., W. C.
Electro-Mechanical Dev. Co.
Emerson App. Co.
Federal Products
Fielden Instr. Div.
Geier & Bluhm
GE
Gilmore Industries
Gurley, W. & L. E.
Hacker & Co.
Hart Moisture Gage
Hygrotester, Inc.
Insco Co.
Instron Eng. Corp.
Jerpbak-Bayless
Matisa Equipt. Co.
Mico Instr. Co.
Minneapolis-Honeywell
Norcross Corp.
Olsen Testing Mach.
Opplem Co., Inc.
Pacific Scientific
Pelouze Mfg. Co.
Perkins & Son
Riehle Testing Machine
Saxl Instr. Co.
Schaevitz Engineering
Scott Testers, Inc.
Shawmut Engrg. Co.
Sheffield Corp.
Shore Instr. & Mfg. Co.
Sipp-Eastwood
Special Instruments Lab.
Standard Electric
Statham Labs.
Steel City Testing Machs.
Suter, Alfred
Taber Instr. Co.
Tatnall Meas. Systems
Tensitron, Inc.
Testing Machines, Inc.
Thwing-Albert
U. S. Testing Co.
Ultra-Violet Prods.
Zeiss, Inc., Carl

THEODOLITES, see Surveying Instruments

THEODOLITES, Magnetic

Askania-Werke A. G.
Berger & Sons
Chicago Aerial Industs.
Davidson Mfg.
Gordon Enterprises
Gurley, W. & L. E.
Hello Instr. Co.
Internat. Devel. Co.
Opplem Co., Inc.
Ruska Instr. Corp.
Suverkrop Instruments
White Co. Inc., David
Wild Heerbrugg

THEODOLITES, Pilot Balloon

Askania-Werke A. G.
Chicago Aerial Industs.
Davidson Mfg. Co.
Fecker Inc., J. W.
Gordon Enterprises
Gurley, W. & L. E.
Hello Instr. Co.
Los Angeles Scient. Instr.
White Co., Inc., David

THERMIONIC RECTIFIERS, see Rectifiers, Thermionic

THERMISTOR MOUNTINGS

Advanced Instrs., Inc.
Aero Research Instr. Co.
Barnes Engrg. Co.
DeMornay-Bonardi, Inc.
F-R Machine
Fenwal, Inc.
General Communication
GE Metall Prods. Dept.
Narda Corp.
Polytechnic Res. & Dev. Co.
Royco Instruments
Tell-Tronics Prods.
Victory Engrg. Corp.
WacLine, Inc.
Weinschel Engrg. Co.
Yellow Springs Instr. Co.

THERMISTORS

Barnes Engrg. Co.
Bendix, Friez Instr. Div.
Bond Electronics Corp.
Clarostat Mfg. Co.
Computer Co. of Amer.
Electronic Cmmunication
Electron-Radar Prods.
Fenwal, Inc.
GE, Metall. Prods. Dept.
Gulton Industries
Hewlett-Packard
Kybernetes Corp.
Lewis Engrg. Co.
Narda Corp.
Olympic Devel. Co.
Robertshaw-Fulton
Servo Corp. of Amer.
Sprague Electric
Stupakoff Div.
Victory Engr. Corp.

THERMO-AMMETERS, see Ammeters

THERMOCOUPLE CIRCUIT TESTERS, including Restorers

B & H Instr. Co.
Barber-Colman Co.
Bristol Co.
Dyna-Empire, Inc.
Goldak Co.
Jarco Services, Inc.
Lewis Engrg. Co.
Pace Engrg. Co.

THERMOCOUPLE INSULATORS

Airflo Instr. Co.
Barber-Colman
Bristol Co.
Centralab
Ceramaseal Co.
Conax Corp.
Dyna-Empire, Inc.
Electro-Tech Equipment
Elematic Equipt. Corp.
Engelhard Inc., Chas.
Foxboro Co.
Gordon Co., Claud S.
Illinois Testing Labs.
Jones Optical
Leeds & Northrup
McDanel Refractory
Morganite, Inc.
Pyrometer Co. of Amer.
Pyrometer Instrument Co.
Richards Co., Arklay S.
Saxonburg Ceramics
Steatite Div.
Stupakoff Div.
Thermal Syndicates, Ltd.
Thermo Electric Co.
Thermo-Prods. Co.
Thor Ceramics, Inc.
Thwing-Albert
West Instr. Corp.

THERMOCOUPLE WELLS, see Thermowells

THERMOCOUPLE WIRE and COMPONENTS including Extension Lead Wire

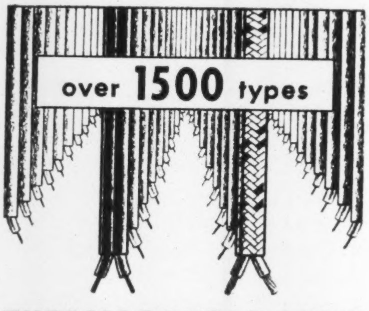
Aero Research
Airflo Instr. Co.
American Platinum Wks.
Assembly Products
Baker & Co.
Barber-Colman
Barrows Porcelain Co.
Bishop & Co., J.
Boston Insul. Wire
Breeze Corp.
Bristol Co.
Campbell Co., J. A.
Conax Corp.
Continental Sensing
Corning Glass Works
Driver Co., Wilbur B.
Drive-Harris
Du-Co Ceramics
Dyna-Empire, Inc.
Eitzen Co.
Electro-Tech Equipt. Co.
Elematic Equipt. Corp.
Englehard, Chas.
Fielden Instr. Div.
Fish-Schurman
Foxboro Co.
GE Apparatus Sales
Gordon Co., Claud S.
Huppert Co., K. H.
Illinois Testing Labs
Indus. Pyrometer & Supply
J-B-T Instruments
Joy Co., Clark H.
Karn Chem. Equipt. Co.
Leeds & Northrup
Lewis Engrg. Co.
McDanel Refractory
McHugh & Son
Minneapolis-Honeywell Indust. Div.
Morganite, Inc.
Moeller Instr. Co.
Precision Tube Co.
Pyro-Electric
Pyrometer Co. of Amer.
Pyrometer Instr. Co.
Pyrometer Service Co.
Revere Corp. of Amer.
Richards, Arklay S.
Secon Metals Corp.
Thermal Syndicate Ltd.
Thermo Electric Co.
Thermo-Products Co.
Thwing-Albert
Tipp-Tronic, Inc.
Trinity Equipt. Co.
Turner Electric
Tuttle & Kift, Inc.
Uniform Tubes Inc.
U. S. Rubber
Viking Electric
Wabash Metal Prod.
West Instr. Corp.
Wheatstone Corp.
Wheelco Div.
Winslow Co.

THERMOCOUPLES, Base Metal (see also Wire, Thermocouple)

Aero Res. Instr. Co.
Aerotech Specialties
Airflo Instr. Co.
Assembly Products
Astra Tech. Instr.
Bacharach Indust. Instr.
Bailey Meter Co.
Barber Colman
Baso, Inc.
Bishop & Co., J.
Bristol Co.
Campbell Co., J. A.
Conax Corp.
Continental Sensing, Inc.
Cybertronic Corp.
DeJur-Amsco
Dyna-Empire
Eitzen Co., Louis Co.
Electro-Tech Equip.
Elematic Equipt. Corp.
Engelhard, Chas.
Fenwal Inc.
Foxboro Co.
General Controls
GE, Apparatus Sales
Gordon Co., Claud S.
Gordon Machine & Tool
Hastings—Raydist
Huppert Co.
Illinois Testing Labs.
Indust. Pyrometer & Supply
Instrument Lab., Inc.
J-B-T Instruments
Joy Co., Clark H.
Karn Chem. Equip.
Leeds & Northrup
Lewis Engrg. Co.
London Div., Land-Air
Manning, Maxwell & Moore
Marshall Co., L. H.
McHugh & Son
Meters, Inc.
Minneapolis-Honeywell Indust. Div.
Pacific Scientific
Perkin-Elmer
Precision Tube Co.
Propulsion Devel. Labs.
Pyro-Electric
Pyrometer Co. of Amer.
Pyrometer Instr. Co.
Pyrometer Service Co.
Revere Corp. of Amer.
Richards Co., **Arklay S.**
Simpson Electric
Std. Tool & Mach. **Co.**
Taylor Instr. Cos.
Thermo-Electric Co.
Thermo-Prods. Co.
Thwing Albert
Trinity Equipt. Corp.
Uniform Tubes Inc.
United Optical
Viking Electric
West Instr. Corp.
Westinghouse Electric
Wheelco Instr. Div.
Winslow Co.

THERMOCOUPLES, Contact Type (see also Thermometers, Surface)

Aero Res. Instr. Co.
Airflow Instr. Co.
Amer. Thermo-Electric
Assembly Products
Bailey Meter Co.
Barber-Colman
Breeze Corporations
Bristol Co.
Cambridge Instr. Co.
Cambell Co., J. A.
Cannon Electric
Continental Sensing
DeJur-Amsco
Dyna-Empire
Electro-Tech Equip.
Elematic Equipt. Corp.
Engelhard, Charles
Epic, Inc.
Foxboro Co.
General Controls Co.
GE, Apparatus Sales
Gordon Co., Claud S.
Hickok Electcl. Instr.
Illinois Testing Labs.
Instrument Lab., Inc.
J-B-T Instruments
Joy Co., Clark H.
Lewis Engrg. Co.
McHugh & Son
Minneapolis-Honeywell **Indust. Div.**
Precision Tube Co.
Propulsion Devel. Labs.
Pyro-Electric
Pyrometer Instr. Co.
Pyrometer Service Co.
Revere Corp. of Amer.
Richards Co., Arklay S.
Rowe Engrg. Co.
Sensitive Res. Instr.
Simpson Electric
Temperature Engrg.
Thermo-Couple Prods.



over **1500** types

THERMOCOUPLE WIRE

Thermo Electric makes and stocks thermocouple and thermocouple extension wire for every conceivable need—actually over 1500 different wire combinations of insulation, calibration and gage size. These include all I.S.A. types, "MIL"-Spec and T-E's versatile "Ceramo" wire.

- **All standard calibrations**
- **Gage sizes from 8 to 40**
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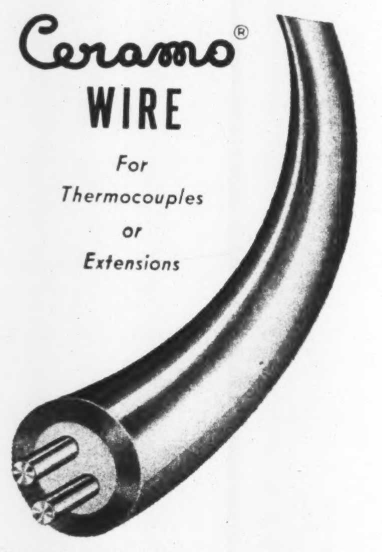
- **Latest advanced insulations with temperature ratings up to 1800°F. "Ceramo" rated up to 3000°F.**
- **Hi-temp overbraid materials**
- **Multi-conductor cables**



Ceramo®

WIRE

For Thermocouples or Extensions

T-E's "Ceramo" wire does the jobs too tough for ordinary thermocouple wire. "Ceramo's" construction—thermo elements and ceramic insulation encased in seamless metal sheathing—gives it unusual durability. It can be bent on an extremely small radius without shorting or grounding. Outer diameters—just .032" for single conductors and .040" for duplex conductors—permit use in "tight" spots. Larger diameters available up to 7/16".

- **All standard calibrations**
- **Temperature ratings up to 3000°F.**

Write for Wire Bulletin 31-FF

Thermo Electric Co. Inc.
Saddle Brook, New Jersey
In Canada—Thermo Electric (Canada) Ltd., Brampton, Ont.

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SINCE 1867

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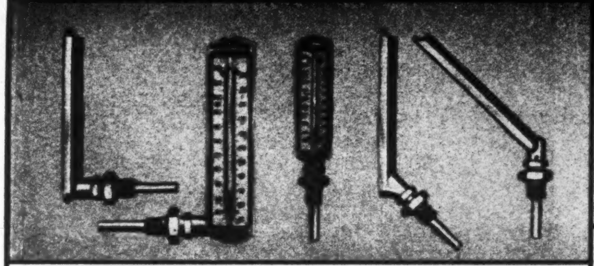
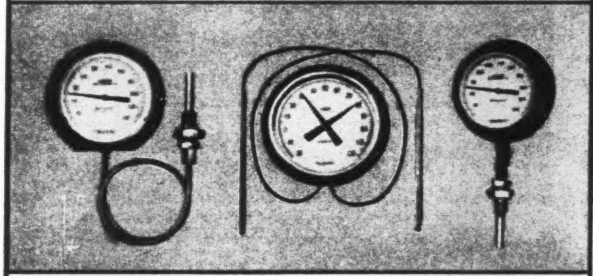
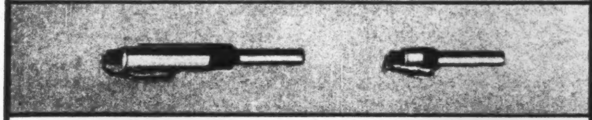
Representatives in Principal Cities



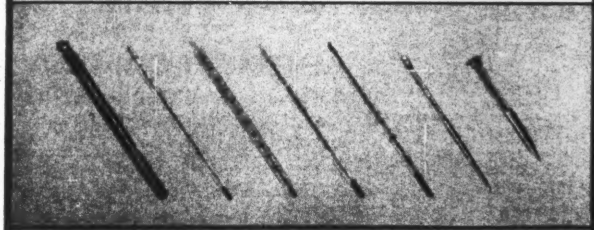
MOELLER INDUSTRIAL THERMOMETERS made in all forms, Straight, Angle, Right Side Angle, Left Side Angle, Reclined and Inclined Angles, in scale ranges from minus 120 to plus 1125°F. or its equivalent in centigrade. Available in 5", 7", 9" and 12" scale sizes with plain stems, union connection stems and separable sockets in all stem lengths and alloys.



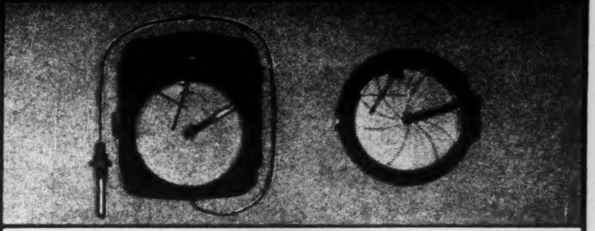
DIAL INDICATING THERMOMETERS, Mercury Actuated, made in 4½", 6" and 8½" sizes with flexible extension tubing. Adjustable rigid stems, single or two pointers, plain bulb, union connection bulb or separable sockets in all lengths and alloys. Scale ranges from minus 40 to plus 1000°F. or its equivalent in centigrade.



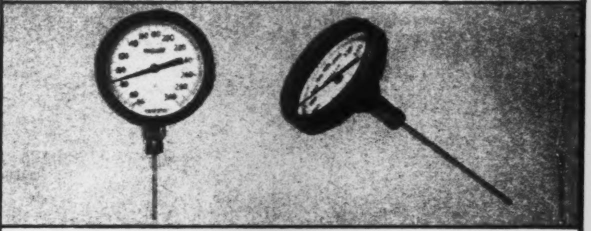
THERMOMETER TEST WELLS, THERMOCOUPLE PROTECTING TUBES and WELLS, made up in all sizes and alloys.



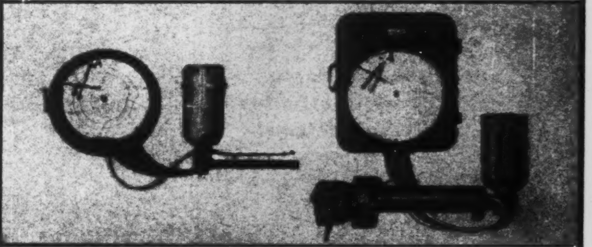
ENGRAVED STEM and PORCELAIN and PAPER SCALE THERMOMETERS made in ranges from minus 150 to plus 1125°F. or its equivalent in centigrade. Available in standard and extreme precision grade. Made to meet specifications of the Government, A.S.T.M. and other authoritative bodies.



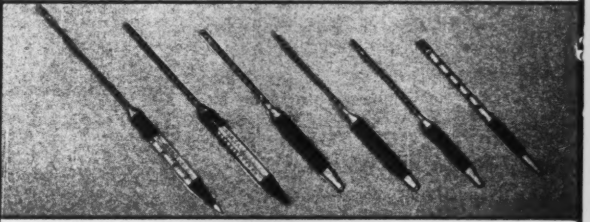
RECORDING THERMOMETERS, Mercury Actuated, made in the round or rectangular cases. Charts 10" or 12", 1 hour, 12 hour, 24 hour or 7 day. Ranges from minus 40 to plus 1000°F. or its equivalent in centigrade. Made in remote reading, direct reading, portable and self contained styles. Plain stems, union connection stems and separable sockets in all stem lengths and alloys.



MOELLER BIMET THERMOMETERS are actuated by a powerful, specially processed bi-metal helix. Made in 5" and 3" diameter case size. Rigid stainless steel stem, can be furnished with union connection stem and separable socket in all alloys. Scale ranges from minus 100 to 1000°F or equivalent in centigrade.



RECORDING PSYCHROMETERS, Mercury Actuated. Round and Rectangular Case, 12 hour, 24 hour or 7 day charts, self contained or remote reading, with or without motor driven fan.



HYDROMETERS PLAIN FORM or COMBINED with THERMOMETER. Made in all scales specific Gravity or Baume for heavy and light liquids. Brix, Twaddle, Ballings Scales, etc. available for all liquids. Standard and commercial grades.

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THERMOCOUPLES

MINIATURE

Iron-Constantan
Copper-Constantan
Chromel-Alumel
Platinum-Rhodium-Platinum

GASKET
BAYONET
RIVET
EXPOSED LOOP
PROTECTED
SHIELDED
STAGNATION

Aircraft Miniature Thermocouples, harnesses, connectors and extension wires, including "MIL" spec types, for turbo and reciprocating engines. Thermocouples designed for airborne or test stand use.

Industrial Miniature thermocouples are made for use in chemical and oil refining processes, power plants, plastic molding, etc.—for any application requiring a small-size yet sensitive assembly.

HEAVY DUTY INDUSTRIAL

Iron-Constantan
Copper-Constantan
Chromel-Alumel
Platinum-Rhodium-Platinum

WIRE
TUBULAR

Heavy Duty thermocouples for all industries and all applications. Accessories include a complete selection of extension wires, terminals, connection heads, quick-coupling connectors and fittings.

PROTECTION TUBES
THERMO WELLS

Available in all commercial materials for all industries. Both built-up and bar stock.

Write for Thermocouple Catalog CFF

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Saddle Brook, New Jersey
In Canada—
Thermo Electric (Canada) Ltd., Brampton, Ont.

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Thermo-Electric Co
Thermo-Prods. Co.
Thwing-Albert
Tipp-Tronic, Inc.
Trerice Co., H. O.
Trinity Equipt. Corp.
Ultradyne Engrg. Co.
Uniform Tubes, Inc.
Viking Electric
West Instr. Corp.
Westinghouse Electric
Wheelco Instr. Div.
Winslow Co.

THERMOCOUPLES, Immersion

Aero Res. Instr. Co
Aerotech Specialties
Airflo Instr. Co.
Astra Tech. Instr
Autoclave Engrs.
Barber-Colman
Bristol Co.
Consol. Controls Corp
Continental Sensing
Dyna-Empire, Inc.
Electro-Tech Equip.
Elematic Equipt. Corp
Epic, Inc.
Gordon Co., Claud S.
Harco Labs.
High Pressure Equip.
Huppert Co
Illinois Testing Labs.
Instrument Lab., Inc
Joy Co., Clark H.
Leeds & Northrup
Lewis Engrg. Co.
Marshall Co., L. H.
McHugh & Son
Minneapolis Honeywell
  Industr. Div.
Propulsion Devel. Labs
Pyro-Electric
Pyrometer Co. of Amer.
Pyrometer Instr. Co.
Revere Corp. of Amer.
Richards Co., Arklay S
Std. Tool & Mach. Co
Taylor Instr. Cos.
Temperature Engrg.
Thermo-Couple Prods
Thermo Electric Co
Thermo-Prods. Co
Thwing-Albert
Trerice Co., H. O
Trinity Equipt. Corp
Tuttle & Kift, Inc.
West Instr. Corp

THERMOCOUPLES, Rare Metal, including Platinum (see also Wire, Thermocouple)

Aero Res. Instr. Co
Airflo Instr. Co.
Amer. Platinum Works
Baker & Co., Inc
Barber-Colman
Bishop & Co., J.
Bristol Co.
Continental Sensing
Electro-Tech Equip.
Foxboro Co.
GE Apparatus Sales
Gordon Co., Claud S.
Harco Labs.
Huppert Co.
Illinois Testing Labs
Joy Co., Clark H.
Leeds & Northrup
Lewis Engrg. Co.
McHugh & Sons
Minneapolis-Honeywell
  Indust. Div.
Pyro-Electric
Pyrometer Co. of Amer
Richards Co., Arklay S.
Taylor Instr. Cos.
Thermo-Couple Prods
Thermo Electric Co
Thermo-Prods. Co.
Thwing-Albert
Tipp-Tronic, Inc
Trinity Equipt. Corp.
Tuttle & Kift, Inc.
West Instr. Corp.

THERMOCOUPLES, Separate Heater Type

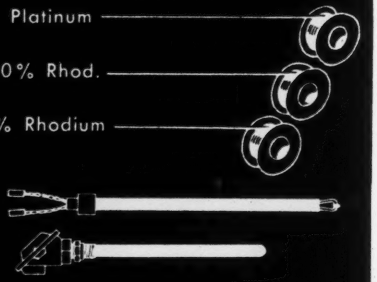
Aero Res. Instr. Co.
Amer. Thermo-Electric
Barber Colman
Breeze Corporations
Bristol Co.
Campbell Co., J. A
Continental Sensing, Inc
Dyna-Empire
Electro-Tech Equipt. Co
Electron-Radar
General Controls Co.
GE
General Radio Co.
Gordon, Claud S.
Harco Labs.
Illinois Testing Labs
Lewis Engrg. Co.
Pyro-Electric
Sensitive Res. Instr.
Temperature Engrg.
Thermo Electric Co.
Thermo-Prods. Co.
Tuttle & Kift, Inc.
Ultradyne Engrg. Co
Vacuum Tube Prods.
West Instr. Corp.
Westinghouse Electric
Wheelco Instr. Div.

THERMOCOUPLES, Vacuum

Amer. Thermo Electric
Barber-Colman
Beckman Instruments
Biddle Co., James G.
Cambridge Instr. Co.
Consolidated Vacuum Corp
Distillation Products
Farrand Optical
Fredericks Co., George
GE-Apparatus Sales

TPC

NOBLE METAL THERMOCOUPLES



BARE WIRE
Platinum
Plat.-10% Rhod.
Platinum-13% Rhodium

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COMPLETE
ASSEMBLIES

Our wide experience has made us one of the leading suppliers of noble metal thermocouples. Immediate credit allowance for scrap wire with your order. Submit sketch or drawings on your requirements. Our local Sales Representative will be glad to assist you.

STANDARD AND SPECIAL THERMOCOUPLES — THERMISTORS — INSTRUMENTATION

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Hastings-Raydist
Hickok Electcl. Instr
High Vacuum Equipt. Corp
National Research
Perkin-Elmer
Philadelphia Scientific
Pyrometer Instr. Co
Rawson Electcl. Instr
Sensitive Res. Instr.
Smith Co., Arthur F.
Temperature Engrg
Thermo-Electric Co.
Thermo-Prod. Co.
Trinity Equipt. Corp.
Ultradyne Engrg.
Universal X-Ray Prods.
Vacuum Tube Products Co
Westinghouse Electric
Wheelco Instr. Co.

THERMO-HYDROMETERS, see Hydrometers, Thermo

THERMOMETER TEST WELLS, see Thermowells

THERMOMETER TESTERS, see Temperature Calibration

THERMOMETER TUBES, see Thermowells

THERMOMETERS, Dial, Bimetal

Bacharach Indust. Instr.
Dillon & Co., W. C.
Electro-Tech Equip.
Garden City Instruments
Germanow-Simon Mach. Co.
Hiergesell & Sons
LaPine & Co.
Manning, Maxwell & Moore
Marsh Corp., Jas. P.
Marshall Instr., Inc
Marshalltown Mfg
Moeller Instr. Co.
Pacific Transducer
Palmer Thermoms., Inc
Prec. Therm. & Insts
Rochester Mfg. Co.
Sarco Co.
Scientific Instr. Co
Seegers Mfg. Co
Sticht Co., Herman H
Swift & Anderson
Taylor Instr. Cos.
Testing Machines, Inc
Thermom. Corp. of Amer
Trerice Co., H. O.
Weksler Instrs
Weston Instrs

Vacuum Thermocouples by Ormandy & Stollery, Ltd.

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Std. type 1.25 m/A—1000 m/A
U.H.F. type 5 m/A—1000 m/A
Air types 1 Amp—30 Amps.

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—Vacuum types Insulated or Contact
—Fast response and very stable
—Reversal errors as low as 0.1%
—Very low cost with speedy delivery
—All work hand made

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ORMANDY & STOLLERY, LTD.

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Brightlingsea, Essex, England

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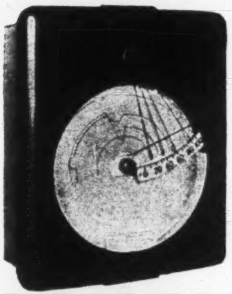

BAILEY

Resistance Thermometer

- Platinum resistance temperature element measures −400F to + 1200F; transmits to precalibrated "plug-in" type receivers in Bailey a-c PYROTRON Receiver Recorder.

One to four continuous temperature records are made on a single 12 in circular chart. Each recording pen responds instantly since it is controlled by a separate inertia-free electronic detector. Each detector has its own power supply. A small reversible electric motor balances the a-c Wheatstone bridge circuit, and drives the indicating, recording, and controlling features. The Bailey a-c PYROTRON Receiver Recorder may be furnished with pneumatic or electrical control.

Any combination of electrically or pneumatically transmitted factors may be combined with temperature in the same recorder which features continuous, one-year, automatic inking.

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Vacuum ... Thermocouples

86 Standard Types and Ranges

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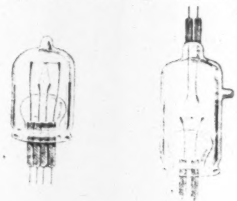

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- RUGGED CONSTRUCTION
- HIGHER OVERLOAD
- FASTER RESPONSE
- LOWER COST
- PROMPT DELIVERY

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Bacharach Indust. Instr. Co.
Bristol Co
Dickson Company
Elect. Auto-Lite Co
Fischer & Porter Co
Foxboro Co
Garden City Instruments
Hill & Co., E. Vernon
Johnson Service Co
Kimble Glass Co
Kontes Glass
Liquidometer Corp
Manning, Maxwell & Moore
Marsh Corp., Jas. P.
Marshalltown Mfg
Minneapolis-Honeywell Indust. Div.
Moeller Instr. Co
Palmer Thermometers, Inc
Partlow Corp.
Philadelphia Thermom. Co
Powers Regulator Co.
Republic Flow Meters
Scientific Instr. Co
Seegers Mfg. Co
Taylor Instrument Co.
Trerice Co., H O
United Instr. Co
U.S. Gauge Div.
Weksler Instrs.
Weston Instrs.

THERMOMETERS, Electrical Resistance, Indicating, Recording and/or Controlling

Ace Glass, Inc.
Advanced Insts.
Amer. Instr. Co.
Arnoux Corp.
Assembly Products
Associated Research
Astra Tech. Instr.
Autron Engrg., Inc.
Avionic Products
Bailey Meter Co.
Barber-Colman
Bendix-Friez
Bogue Elect. Mfg.
Bristol Co.
Cal-Ohm Labs.
Cambridge Instr. Co
Cardinal Instrumentation
Chicago Indust. Instr.
Cleveland Controls
De-Jur-Amsco
Edison, Inc., Thomas A.
Electric Auto-Lite
Electro-Mec Lab.
Electro-Tech Equip.
Engelhard, Chas.
Fielden Instr. Div.
Fisher Scientific
Foxboro Co.
General Controls
GE, Apparatus Sales
G-M Labs.
Giannini & Co.
Gordon Co., Claud S
Gow Mac Instr. Co.
Gray Instr. Co.
Green, Henry J.
Greiner Co., Emil
Hays Corp.
Hickok Electcl. Instr.
Illinois Testing Labs.
Industrial Instr. Corp.
Instrument Associates
J-B-T Instruments
Johnson Service Co.
Joy Co., Clark H.
Kahl Scientific
Larson Instr. Co.
Leeds & Northrup
Lewis Engrg. Co.
Littlefuse, Co.
Liquidometer Corp.
Loudon Insts. Div.
Mac Donald Co., W. S.
Magnetic Controls
Manning, Maxwell & Moore
Martin-Decker Corp.
Mason-Nielan Div.
Minneapolis-Honeywell Indust. Div.
Rubicon Instrs.
Mira Scientific
Moeller Instr. Co.
North Atlantic Industs.
Pacific Scientific
Pacific Transducer Corp.
Penn Insts. Div.
Philadelphia Scientific
Philadelphia Thermom. Co
Phoenix Prec. Instr.
Propulsion Devel. Labs.
Pyrometer Instr. Co.
Robertshaw-Fulton
Roller-Smith
Ruge Assocs., Arthur C.
Scientific Glass App
Scientific Instr. Co.
Shallcross Mfg. Co.
Shand & Jurs Co.
Simpson Electric
Stewart, M. C.
Swartwout Co.
Swieco, Inc.
Technical Equipt. Co.
Tell-Tronics Prods.
Thermo-Electric Co.
Thermometer Corp.
Thwing-Albert
Trans-Sonics, Inc.
Trerice Co., H. O.
Triplett Electcl. Instr.
United Control Corp.
United Optical
Victory Engrg. Co.
Wagner & Son
Webber Gage Co.
Weller, Paul G.
Weksler Instrs.
West Instr. Corp.
Westinghouse Electric
Weston Instrs.
Wheelco Instr. Div.
Winslow Co.

THERMOMETERS, Indicating, Glass, including Mercury, Spirit

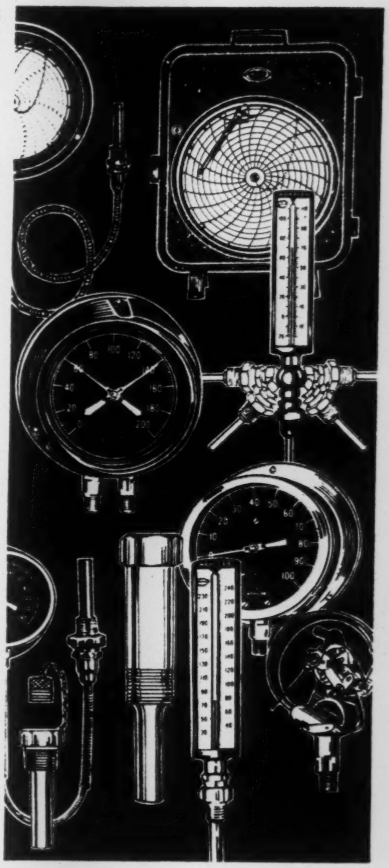
Ace Glass, Inc.
Accurate Inst. Co.
Accuracy Scient. Instr.
Bacharach Indust. Instr.
Bar-Ray Products
Bendix-Friez
Bristol Co
Central Scientific
Century Instr. Co.
Electric Hotpack Co.
Ever Ready Thermometer
Fish-Schurman
Fisher Scientific
G. M. Mfg. Co.
Garden City Instruments
General Scient. Equipt.
Goetz Niemer Co.
Gordon Co., Claud S.
Gotham Instr. Div.
Green, Henry J.
Greiner Co., Emil
Griebel Co., E.
H-B Instr. Co
Hiergesell & Sons
Hill & Co., E. Vernon
Johnson Service Co
Kahl Scientific
Kimble Glass
King Engrg. Co
Kontes Glass
LaPine & Co.
Manning, Maxwell & Moore
Microchemical
Minneapolis-Honeywell
Moeller Instr. Co.
Nurnberg Thermometer
Owens-Illinois Glass Co
Palmer Thermometers
Paulstick & Sons
Philadelphia Scientific
Philadelphia Thermom. Co
Phoenix Prec. Instr.
Precision Scientific
Prec. Therm & Insts.
Rascher & Betzold
Ruttco Mfg. Co.
Scientific Glass App
Scientific Instr. Co.
Seedburo Equipment
Seely Instr. Co.
Simpson Electric
Stortz, John L.
Superior Meter Co
Swift & Anderson
Taylor Instr. Cos
Temp. Engrg. Co
Thermom. Corp. of Amer
Trerice Co., H. O.
United Instr. Co
U. S. Gauge Div
Wagner & Son
Weiss & Son, Albert A
Weksler Instrs.
Weston Instrs.

THERMOMETERS, Indicating, Pressure-spring

Acme Gauge
Bacharach Indust. Instr.
Bailey Meter Co.
Bar-Ray Products
Bristol Co.
Century Instr. Co
Defender Instr. & Reg
Dickson Company
Dillon & Co., W. C.
Elect. Auto-Lite Co.
Foxboro Co.
Garden City Instruments
Gordon Co., Claud S.
Gotham Instr. Div.
Industrial Instr. Corp.
Kahl Scientific Instr.
Liquidometer Co.
Manning, Maxwell & Moore
Marshalltown Mfg. Co.
Marsh Corp., Jas. P.
Mason-Nielan Div.
Minneapolis-Honeywell
Moeller Instr. Co.
Moore Products
Nurnberg Thermom. Co.
Palmer Thermometers
Partlow Corp.
Penn Insts. Div.
Philadelphia Thermom. Co
Powers Reg. Co.
Preferred Utilities Mfg
Republic Flow Meters
Rochester Mfg. Co
Sarco Co., Inc.
Scientific Instr. Co
Seegers Mfg. Co.
Standard Thermometer
Taylor Instr. Cos.
Testing Machines, Inc.
Thermometer Corp.
Trerice Co., H. O.
United Instr. Co
Weksler Instrs.
Welch Scientific
Weston Instrs.

THERMOMETERS, Maximum and Minimum Registering

Accuracy Scient. Instr.
Bacharach Indust. Instr.
Bendix-Fries
Bristol Co.
Electric Auto-Lite
Electro-Physics Co.
Ever Ready Thermometer
Fisher Scientific
Fleischhauer & Son



SOLVE YOUR PROBLEMS WITH

Weksler Instruments

Weksler Instruments for temperature, pressure and humidity applications have been installed in literally thousands of commercial and industrial projects... routine, special, and classified.

Whatever your requirements or problems may be in these types of instrumentation, Weksler may be the one source to meet or answer all of them.

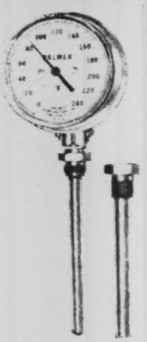
Tell us your instrument needs. We will send you one or more of the five WEKSLER CATALOGS which cover your specific requirements. Advisory services are also available without obligation.

WEKSLER INSTRUMENTS

WEKSLER INSTRUMENTS CORP.
FREEPORT, L. I., NEW YORK

For more information circle **332** on inquiry card.

PALMER a great name in thermometers



PALMER "DIRECT DRIVE" 3½" DIAL THERMOMETER

An outstanding improvement in mercury actuated dial thermometers with external calibration feature.

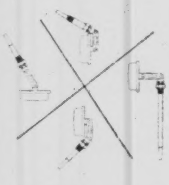
- No Sector
- No Pinion
- No Linkage
- Accuracy
- Readability
- Angularity

Case . . . stainless steel, compensated for ambient temperature, external calibrating feature. Cover . . . clear plastic, gasket-sealed to stainless steel back-plate. Actuation . . . direct drive Bourdon coil. (No sector, pinion or linkage.) Stem . . . ½" diameter stainless steel, standard lengths: 4"—6"—8"—12", multiples of 6" up to 60" max. . . . Fittings . . . separable socket, union connection (½" or ¾" NPT), flange union.

PALMER 4½" DIAL THERMOMETER

Adaptable and interchangeable with all Industrial Thermometer applications.

MERCURY-ACTUATED. Guaranteed accuracy. Size: 4½" Dial.



Designed for use as STRAIGHT or any ANGLE. With clear vision all-glass moulded case and metal back. Fittings: Plain, Union, Socket; adjustable or union Flanges.

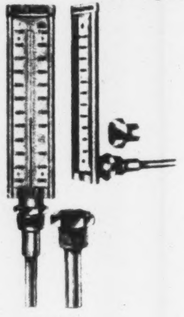
STANDARD RANGES:

−30+130°F.	1°	0+300°F.	2°	0+600°F.	5°
0+150°F.	1°	0+400°F.	5°	+200+750°F.	5°
0+240°F.	2°	0+500°F.	5°	+200+950°F.	5°

or equivalent °C—no extra charge

INDUSTRIAL THERMOMETERS with "Red-Reading-Mercury"

CASE: 7", 9" or 12" Extruded brass. Wide scale. Chrome finish.
TUBE: Red-Reading-Mercury Easy to Read. Thoroughly annealed for permanent accuracy. Protected by double-strength glass shield. Graduated scale.



Straight

FITTINGS: Fixed thrd., Union, Sep. Socket; adjustable or union Flange; parallel thrd. & locknut; special fttgs. to order.

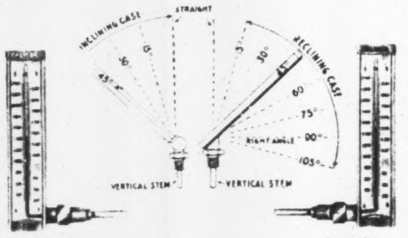
STEM: STRAIGHT and Misc. ANGLES. 3½" to 60", incl. thread.

THREAD: ¾" or 1" NPT (½" not recom.)

STANDARD RANGES:

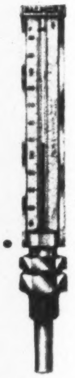
−40+110°F	2°	+ 50+400°F	5°
0+100°F	1°	+100+550°F	5°
+30+180°F	2°	+200+750°F	5°
+30+240°F	2°	+200+950°F	5°
+30+300°F	2°		

Plain Mercury. Borosilicate tube. Centigrade equiv.—no extra. Spec. Ranges—cost more.



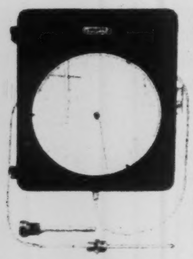
Right Side

Left Side



SMALL CASE THERMOMETERS

4" case ⅜" & ½" Fixed Thrd. Fttg.
6" case: ½" & ¾" Sep. Socket Fttg.
Extruded case. Durable Nickel finish.
"Red-Reading-Mercury". Guaranteed accurate.

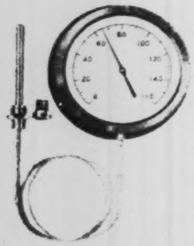


RECORDING and DIAL THERMOMETERS

With Flexible Tubing Connection.

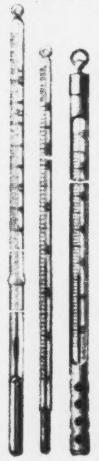
Mercury-actuated, for extreme accuracy. Sturdy construction, very sensitive. All parts rust-proof. Stainless-steel bulb. Wall or Flush Mounting. Bottom or Back connection. Fittings: Plain, Union, Sep. socket; Adj. or Union Flanges.

Ranges: —40 to 1000°F. (or C).



RECORDER: 12" die-cast alum. case; Black or white, satin or wrinkle finish; elec. or spring clock; 12 hr., 24 hr., or 7-day charts. One-pen or multiple pens. Also Fully compensated to correct for Ambient Temperature.

DIAL: 6" and 8" round case. Black or white finish. Easy-reading dial.



LABORATORY AND PRECISION THERMOMETERS

All glass engraved mercury tube, with vivid RED column. Round or lens; Ring or button top; With or without metal armor; Total or partial Immersion (3" standard). Each in sep. box. All ranges: up to 750°F. (or C. equiv.).
Plain mercury. Borosilicate tube. +200+950°F. Special ranges & dimensions to order. Fractional division, A.S.T.M. etc.
Also handy 5" Pocket style. Annealed and guaranteed very accurate.

REPAIRS—To all makes of mercury Industrial Thermometers. With "Red-Reading-Mercury" (no extra cost) and new Extruded Brass case included. Guaranteed accurate. Reasonable price.

PALMER THERMOMETERS, INC.
Mfrs. of Industrial Laboratory, Recording and Dial Thermometers
2518 NORWOOD AVE., CINCINNATI 12, O.
CANADIAN PLANT: PALMER THERMOMETER LTD., TORONTO 2

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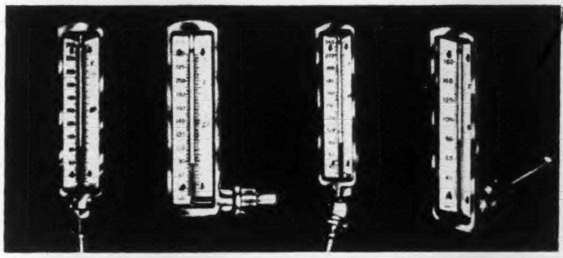
Albert A.
WEISS
INDUSTRIAL THERMOMETERS
ACCURATE - READABLE - DURABLE



THREE-QUARTERS OF A CENTURY OF SPECIALIZATION IN INDUSTRIAL THERMOMETERS FOR ALL INDUSTRIES

WEISS THERMOMETERS are made of • Sturdy one piece cast bronze cases in "silver-green" finish • Protective glass front with patented feature for easy removal and cleaning • Red-reading mercury tube • Individually engraved scales enameled on brass stock for accurate calibration and easy reading.

WEISS THERMOMETERS are made in all forms: straight, right side and left side angles, reclined and inclined angles, with stems and connections to fit almost any need.

Write for colorful and comprehensive catalog and price list.

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THERMOMETERS

ALBERT A. WEISS & SON, INC.
ESTABLISHED 1882
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BROOKLYN 5, NEW YORK

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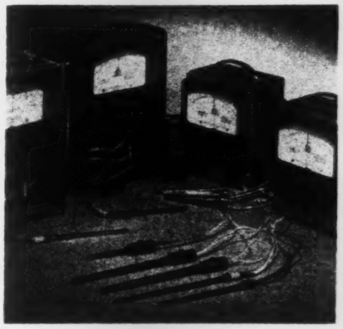
Introducing——
THERMISTOR ACTUATED
THERMOMETERS

For the first time a line of thermistor actuated thermometers is offered by Marshall Instruments, Inc. for industrial applications.



The principal advantages of thermistor type thermometers are:

1. Extreme accuracy and sensitivity.
2. Can be used remotely hundreds of feet distant from probe with no effect on indication accuracy.
3. Large 4-inch dial. Either AC or battery operated.
4. Rugged—probes withstand pressure, shock or vibration.

Exclusive Manufacturers of Standard and Special Bimetallic Dial Thermometers

MARSHALL INSTRUMENTS, Inc.
14203 Bessemer St. Van Nuys, Calif.

For more information circle **335** on inquiry card.

Foxboro Co.
G. M. Mfg. Co.
Garden City Instruments
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Gordon Co., Claud S.
Gostham Instr.
Green, Henry J.
Greiner Emil
H-B Instr. Co.
Hiergesell & Sons
Instruments Corp.
Kahl Scientific Instr.
Kimble Glass Co.
Larson Instr. Co.
Lewis Engrg. Co.
Manning, Maxwell & Moore
Marshall Instr., Inc.
Moeller Instr. Co.
Nurnberg Thermom. Co.
Pacific Transducer Corp.
Palmer Thermometers
Partlow Corp.
Philadelphia Scientific
Philadelphia Thermom. Co.
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Rochester Mfg. Co.
Scientific Glass App.
Scientific Instr. Co.
Seedburo Equipt. Co.
Seegers Mfg.
Taylor Instr. Cos.
Thermom. Corp. of Am.
Trerice Co., H. O.
Wagner & Son
Weksler Instrs.
Weston Instrs.

THERMOMETERS, Recording and or Controlling, Filled Systems

Alden Products
Bacharach Indust. Instr.
Bailey Meter Co.
Barber-Colman
Bristol Co.
Century Instr. Co.
Dickson Co.
Elect. Auto-Lite
Elematic Sales Corp.
Fischer & Porter Co.
Foxboro Co.
G. M. Mfg. Co.
Garden City Instruments
General Controls Co.
Giannini & Co., G. M.
Gotham Instr. Div.
Green, Henry J.
H-B Instr. Co.
H&H Thermostats
Hagan Chem. & Controls
Hays Corp.
Industrial Insts.
Instruments Corp.
Johnson Service Co.
Kahl Scient. Instr.

Liquidometer Co.
Littelfuse, Inc.
Manning, Maxwell & Moore
Marsh Corp., Jas. P.
Mason-Neilan Div.
Minneapolis-Honeywell
  Indust. Div.
Moeller Instr. Co.
Moore Products
Nurnberg Thermom. Co.
Pacific Transducer Corp.
Palmer Thermometers
Partlow Corp.
Penn Insts. Div.
Philadelphia Scientific
Philadelphia Thermom. Co.
Powers Reg. Co.
Preferred Utilities Mfg.
Republic Flow Meters
Ryan Recording Thermom.
Sarco Co., Inc.
Scientific Instr. Co.
Serdex, Inc.
Standard Thermom. Co.
Taylor Instr. Cos.
Thermometer Corp.
Thwing-Albert
Trerice Co., H. O.
U. S. Gauge Div.
Wagner & Son
Weksler Instrs.
Weston Instrs.
Westronics, Inc.

THERMOMETERS, Surface

Arnoux Corp.
Astra Tech. Instr.
Bristol Co.
Cal-Ohm Labs.
Cardinal Instrumentation
Ercona Corp.
Fisher Scientific
G. M. Mfg. Co.
Garden City Instruments
Green, Henry J.
Hiergesell & Sons
Industrial Gauges Corp.
Loral Electronics
Minneapolis-Honeywell
Moeller Instr. Co.
Natl. Inst. Labs.
Pacific Transducer Corp.
Pyrometer Instrument Co.
Ruge Assocs., Arthur C.
Scientific Instr. Co.
Simpson Electric
Sunshine Scient. Instr.
Thermometer Corp. Amer.
Trans Sonics, Inc.
Trerice Co., H. O.
Victory Engrg. Corp.
Weksler Instrs.
West Instr. Corp.
Weston Instrs.
Yellow Springs Instr.

THERMOMETERS, Thermistor (see also Thermistors)

Advanced Insts.
Aero Res. Instr. Co.
Bristol Co.
Central Research Labs.
Electro-Medical Lab.
Fisher Scientific
G. M. Mfg. Co.
Gulton Mfg. Corp.
Industrial Dev. Labs.
LaPine & Co.
Lewis Engrg. Co.
Moeller Instr. Co.
Olympic Development
Rust Industrial Co.
Sargent & Co.
Swieco Inc.
Tell-Tronics Prods.
Thermometer Corp. Amer.
Trerice Co., H. O.
Victory Engrg. Corp.
West Instr. Corp.
Williamson Devel. Co.
Yellow Springs Instr.

THERMOPILES, see Radiation Pickups

THERMOREGULATORS, Bimetallic

Accessory Products
AiResearch Mfg. Co.
Amer. Instr. Co.
Amperite Co., Inc.
Bar-Ray Products Inc.
Bristol Co.
Burling Instr.
Central Scientific
Electric Hotpack
Fenwal, Inc.
Gordon Co., Claud S.
Kauffman-Lattimer
Leeds & Northrup
Moeller Instr. Co.
National Appliance Co.
Perfex Corp.
Philadelphia Thermom. Co.
Scientific Instr. Co.
Stevens Mfg. Co.
Taylor Instr. Cos.
Temp. Engrg. Corp.
Thermometer Corp.
Trerice Co., H. O.
Ulanet Co.
Valverde Labs.

THERMOREGULATORS, Mercury-in-Glass

Accuracy Scientific Instr.
Aloe, Co., A. S.
Amer. Instr. Co.
Bendix-Friez
Brabender Instrs.
Bristol Co.
Central Scientific
Chicago Surgical & Elect.
Electric Hotpack Co.
Fish-Schurman
Fisher Scientific
G. M. Mfg. Co.
Garden City Instruments
Green, Henry J.
Greiner, Emil
H-B Instr. Co.
Hiergesell & Sons
Labline, Inc.
LaPine & Co., A. S.
Moeller Instr. Co.
Philadelphia Scientific
Philadelphia Thermom. Co.
Precision Scientific
Prec. Therm. & Insts.
Process & Instruments
Sargent & Co., E. H.
Scientific Glass App.
Scientific Instr. Co.
Taylor Instr. Cos.
Temp. Engrg. Corp.
Thermometer Corp.
Trerice Co., H. O.
Weksler Instrs.
Weston Instrs.

THERMOSTATIC ELEMENTS and METALS, including Bimetallic Materials, Springs, Strips, Fabricated parts, etc.

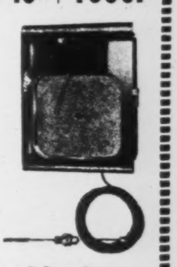
Amer. Platinum Wks.
Amer. Silver Co.
Baker & Co., Inc.
Bar-Ray Products
Bishop Platinum Wks.
Brainin Co., C. S.
Bridgeport Thermostat
Bristol Co.
Chace Co., W. M.
Chatillon & Sons, John
Clifford Mfg. Co.
Cooper Co., Clark
Dole Valve Co.
Fineisen, A. B.
Eisler Electric Corp.
Fulton Sylphon Div.
General Controls
GE Spec. Electronic
General Plate Div.
H-B Instr. Co.
Handy & Harman
Hartford Machine Screw
Illinois Coil Spring
Jessop Steel Co.
Metal Goods Corp.
Precision Products
Roebling Sons Co.

THERMOMETERS, —Recording and Automatic Controlling . . . for temperatures from −125F to +1000F

Bristol Series 500 Thermometers, the product of over 69 years of instrument-making experience, feature the latest developments in instrument engineering.

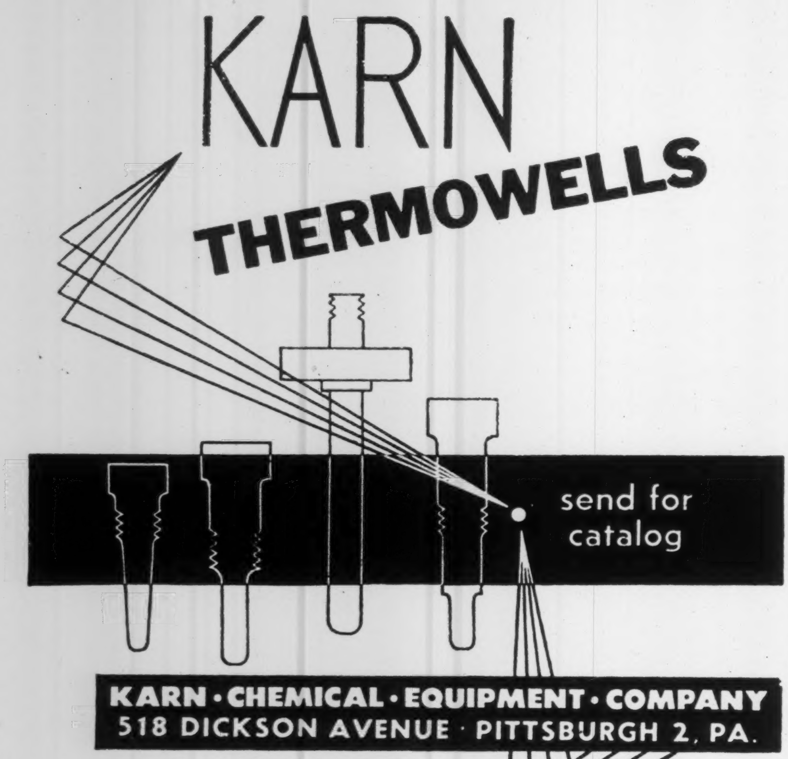
In manufacturing hundreds of thousands of recording and automatic controlling thermometers, The Bristol Company has developed a variety of models, sizes, and temperature ranges to fill every requirement.

Write for Bulletin T840.



BRISTOL COMPANY
112 Bristol Rd., Waterbury 20, Conn.

For more information circle **336** on inquiry card.



KARN · CHEMICAL · EQUIPMENT · COMPANY
518 DICKSON AVENUE · PITTSBURGH 2, PA.

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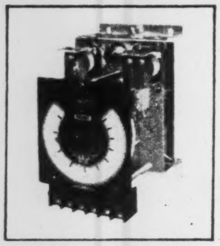
ACCURATE, FULLY ADJUSTABLE
atc ELECTRONIC TIMERS



For short interval time control of machine and process operations, ATC Electronic Timers, Series 5200, provide high accuracy, unaffected by either line voltage fluctuations, tube aging or vibration.

The dial is accurately calibrated; the pointer can be easily set over full range within a fraction of a second. Two standard ranges—from .02 to 1.0 seconds adjustable in 0.01 sec increments, or from 0.2 to 10 seconds adjustable in 0.1 sec increments — can quickly be selected by flipping a toggle switch. 30 second range Series 5200 Electronic Timers are available, as well as Timers with the dial calibrated in cycles instead of seconds, 1 to 50 cycles in ½ cycle steps.

WRITE TODAY for full information on Series 5200 Electronic Timers.

atc ®
AUTOMATIC TIMING & CONTROLS, Inc.
KING OF PRUSSIA 1, PA.
A SUBSIDIARY OF SAFETY INDUSTRIES, INC.
ATC EXPORT DEPT.: 1010 SCHAFF BLDG., PHILADELPHIA 2, PA., U.S.A

For more information circle 338 on inquiry card.

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Scovill Mfg. Co.
Seegers Mfg.
Sherman & Co.
Simonds Saw & Steel
Staver Co., Inc.
Synchro-Start Products
Ulanet Co.
Universal-Cyclops Steel
United Electric Controls
Wilson Co., H. A.

THERMOSTATS

Accuracy Scient. Instr.
Advanced Insts.
Aero Supply Mfg. Co.
Allen-Bradley
Alloy Bellows Engrg. Co.
Amer. Instr. Co.
Andrew Techn. Supply
A-P Controls Corp.
Barber Colman
Baso, Inc.
Blue M. Electric
Brabender Instrs.
Bridgeport Thermostat
Bristol Co.
Burling Instr. Co.
Chatham Conts. Corp.
Chicago Surgical & Elect
Control Products
Cook Electric
Curtis Devel. & Mfg. Co.
Curtiss-Wright
Dales Co., Franklin
Denison Engrg. Co.
Dickson Co.
Douglass Automatic
Edison Inc., Thomas A.
Electric Hotpack Co.
Elematic Sales Corp.
Electro-Tech Equipt. Co.
Emerson Apparatus Co.
Farris-Stacon
Fenwal, Inc.
Fish-Schurman
Flexonics Corp.
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GE, Apparatus Sales
General Controls Co.
Gleason-Avery
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Hagan Corp.
Hart Mfg. Co.
Hawk Tool Engrg. Co.
H-B Instr. Co.
Heat-Timer Corp.
Henschel Corp.
Jordan Reg. Corp.
Keckley Co., O. C.
Klipfel Mfg. Co.
Labline, Inc.
Leslie Co.
Mack Electric Devices
Manning, Maxwell & Moore
Mech. Industs. Prodn. Co.
Mercoid Corp.
Minneapolis Honeywell
Modern Lab. Equipt. Co.
Moeller Instr. Co.
National Controls
Partlow Corp.
Penn Electric Switch
Philadelphia Scientific
Philadelphia Thermom. Co.
Powers Reg. Co.
Precision Scientific
Prec. Therm. & Insts.
Preferred Utilities
Pemier Crystal Labs.
Rascher & Betzold
Robertshaw-Fulton
Sarco Co.
Scaico Controls
Scientific Glass App.
Security Valve Corp.
Smith Control & Instr.
Soreng Products
Spencer Thermostat Div.
Standard Thermom., Inc.
Stevens Mfg. Co.
Still-Man Equipt. Corp.
Temp. Engrg. Corp.
Tenney Engrg. Co.
Trerice Co., H. O.
Tuttle & Kift, Inc.
Ulanet Co.
United Electric Controls
Valverde Labs.
Viking Instruments
Westinghouse Electric
Wilcolator Co.
Zeiss, Inc., Carl.

THERMO-VOLTMETERS, see Voltmeters, Thermo

THERMOWELLS

Accuracy Scient. Instr.
Acme Gauge
Airflo Instr. Co.
Alpha Metals
Amer. Instr. Co
Amer. Thermo. Ware
Amer. Lava Corp.
Amersil Co.
Bristol Co.
Caldwell, Farley M.
Campbell Co., J. A.
Century Instr. Co.
Cleveland Process Co
Corning Glass
Daniel Orifice Fitting
Driver-Harris Co.
Du-Co Ceramics
Duraloy Co.
Eisele & Co.
Engelhard, Inc., Charles
Falls Industries
Fenwal, Inc.
Fish-Schurman
Foxboro Co.
GE
General Scient. Equipt.
G. M. Mfg. Co.
Gordon Co., Claud S.
Gordon Machine & Tool
Gotham Instr. Co
Gove's Sons, Hartley
Greiner, Emil
H-B Instr. Co.
Hergesell & Sons
Hills-McCanna Co.
Hoskins Mfg. Co.
Industrol Corp.
Indust. Instr. Corp.
Instrument Lab.
Jarco Services
J-B-T Instruments, Inc.
Jerguson Gage & Valve
Kahl Scientific Instr.
Karn Chem. Equipt. Co.
Leeds & Northrup
Manning, Maxwell & Moore
Marshall Instruments
McDanel Refractory
Minneapolis-Honeywell
  Indust. Div.
Moeller Instr. Co.
Nurnberg Thermom. Co.
Pacific Transducers
Palmer Thermometers
Parisian Novelty
Pioneer Electronics
Prec. Therm. & Insts.
Preis Engrg. Mach.
Res. Appliance Co
Scientific Glass App.
Scientific Instr. Co.
Sentinel Glass Co.
Stupakoff Div.
Summerill Tubing Co
Teichert Engrg. Co
Temp. Engrg. Corp.
Thermo-Electric Co
Thermometer Corp.
Thwing-Albert
Trerice Co., H. O
Trinity Equipt. Corp.
United Electric Controls
U. S. Gauge Div.
Universal-Cyclops Steel
Victory Engrg. Co.
Weksler Instrs.

THICKNESS GAGES, Eddy Current (see also Dimensional Gages)

Boonton Radio Corp.
Hays Corp.
Magnaflux Corp.
Metrol Inc.
Unit Process Assemblies

THICKNESS GAGES, Magnetic

Aero Electronics
Amer. Instr. Co.
Branson Instruments
Bristol Co.
Cleveland Instr. Co.
Daytronic Corp.
Electro-Tech Equip.
Federal Products
Gardner Lab.
GE, Apparatus Sales
Hathaway Instr. Co.
Hickok Electcl. Instr.
Hygrotester Inc.
Industrial Electronics
Krouse Testing Machine
Magnaflux Corp.
Metrol Inc.
Metron Instr. Co.
Pratt & Whitney Co
Schaevitz Engrg.
Sheffield Corp.
Sunshine Scientific
Tracerlab, Inc.

THICKNESS GAGES, Radiation

Amer. Tradair Corp
Baird-Atomic
Branson Insts. Inc.
Curtiss-Wright
De-Tec-Tronic Corp.
Fleetwood Labs., Inc
GE, X-Ray Dept.
Industrial Nucleonics
Instruments Inc.
Isotope Products
Nuclear Corp. of Amer.
Nuclear Electronics
Ohmart Corp.
Pratt & Whitney
Radiation Counter Labs
Sheffield Corp.
Technical Assoc.
Tracerlab, Inc.
United Engineers
Waldorf Inst. Co.

THICKNESS GAGES, Ultrasonic

Arenberg Ultrasonic
Branson Instruments
Bristol Co.
Dice Co., J. W.
DoAll Co.
Gulton Industries
Instruments, Inc.
Kahn & Co.
Magnaflux Corp.
Photocon Research
Sheffield Corp.
Sperry Products
Sunshine Scientific
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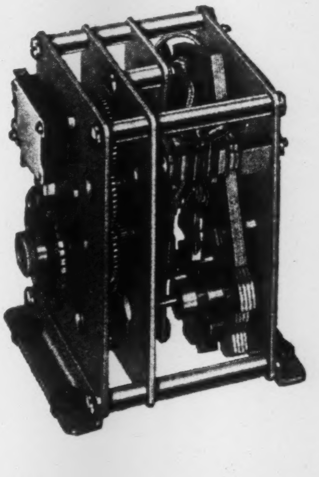

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  Standards, Time

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S-6	1/1000 min.	10 min.	±.0002 min
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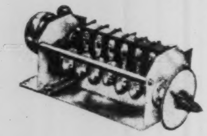

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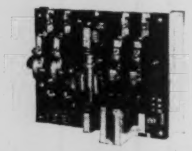

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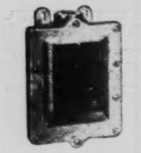

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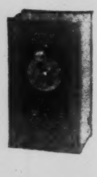

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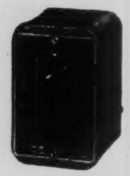

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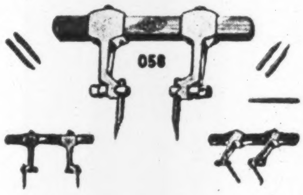

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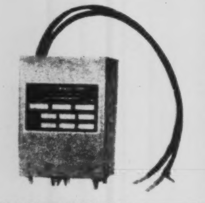

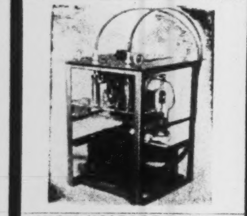

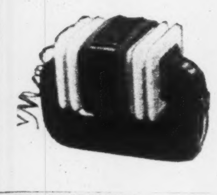

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521 HOMESTEAD AVENUE • MOUNT VERNON, N. Y. • OWENS 9-3232

For more information circle 345 on inquiry card.

Tatnall Meas. Systems
Universal Match
Vectrol Engrg., Inc.
Vectron, Inc.
Vickers Elect. Div.
WacLine, Inc.

TORQUE GAGES

Aero Electronics
Airdraulics Engrg., Inc.
Autom. Temp. Control Co.
Baldwin-Lima-Hamilton
Chatillon & Sons
Crescent Engrg. Res. Co.
Dillon & Co., W. C.
Donner Scientific
Federal Products
Fielden Instr. Co.
GE
Gilmore Industries
Gyroscopics, Inc.
Hathaway Instr. Co.
Herman, Victor George
Industrial Electronics
Internat. Devel. Co.
Jensen Tool Co., H. C.
Jo-Line Tools
Link Engrg. Co.
Metron Instr. Co.
Pelouze Mfg. Co.
Revco, Inc.
Riehle Div.
Ruge Assocs., Arthur C.
Schaevitz Engineering
Statham Instrs.
Sturdy Tool & Gage
Sturtevant Co.
Taller & Cooper, Inc.
Tatnall Meas. Systems
Taylor Instr. Cos.
Tensitron, Inc.
Toledo Scale
U. S. Gauge Div.
Waters Mfg., Inc.

TORQUE MEASURING EQUIPMENT, including Dynamometers (Hydraulic, Hydraulic Tension, Pull Rod, Rotary Absorption, Transmisison.)

Aero Electronics
Airdraulics Engrg. Co.
Allegany Instr. Co.
Ann Arbor Instr. Works
Asch Equipt. Co.
Avion Div.
B & F Instrs.
Baldwin-Lima-Hamilton
Bendix Aviation Corp.
Boulin Instr. Corp.
Bristol Co.
Brush Instruments
Buehler, Ltd.
Cameron Iron Works
Chatillon & Sons
Clark Mfg. Co.
Colman Instr. & Mfg.
Colvin Labs.
Conoflow Corp.
Control Engrg. Co.
Cosa Corp.
Crescent Engrg. & Res. Co.
Dillon & Co., W. C.
Dynamatic Corp.
Electro-Mech. Div.
Emery Co., A. H.
Ercona Corp.
Falcon Machine & Tool
Flight Research, Inc.
Foxboro Co.
GE, Apparatus Sales
Gilmore Industries
Graphite Metallizing
Gyroscopes, Inc.
Hagan Chem. & Controls
Hamilton Watch
Hathaway Instr. Co.
Hayes Scient. Apps.
Humphrey, Inc.
Industrial Electronics
Indust. Engrg. Corp.
Jo-Line Tools
Kahn & Co.
Karl-Douglas Assoc.
Kellog Switchboard
L. B. A. Corp.
Link Engrg. Co.
Livermont, Inc.
Martin-Decker Corp.
Martin-Hubbard Corp.
Mid-West Dynamometer
Minneapolis-Honeywell
  Boston Div.
  Rubicon Instrs.
Monsell, J. R.
Nankervis Co., G. L.
Olsen Testing Machine
Orban Co., Kurt
Pitometer Log Corp.
Polyphase Instr. Co.
Radiation, Inc.
Revco, Inc.
Reliance Elect. & Engrg.
Richmont, Inc.
Riehle Div.
Ruge-de Forest, Inc.
Saxl Instr. Co.
Schaevitz Engineering
Scherr Co., Inc.
Seederer-Kohlbusch
Skyway Prec. Tool
Statham Instrs.
Stoelting Co., C. H.
Sturtevant Co.
Sunshine Scientific
Superdraulic Corp.
Swedish Gage
Taller & Cooper
Task Corp.
Taylor Dynamometer
Testing Machines, Inc.
Tensitron, Inc.
Thwing-Albert
Trimount Instr. Co.
Vectron, Inc.
Waters Mfg. Co.
Western Gear
Wiancko Engrg. Co.

TORQUE WRENCHES, see Wrenches, Torque

TORSIOGRAPHS, see Torsion Meters

TORSION METERS

Aero Electronics
Airdraulics Engineering
Baldwin-Lima-Hamilton
Boulin Instr. Corp.
Chatillon & Sons
Commercial Research
Epic, Inc.
Falcon Machine & Tool
Hamilton Watch
Hathaway Instr. Co.
Riehle Testing Machines
Saxe Instrument
Sturtevant Co.
Tensitron, Inc.
Toledo Scale Co.

TOTALIZERS, Demand

Amer. Meter Co.
Berkeley Div.
Bristol Co.
Esterline-Angus
Fischer & Porter
GE, Apparatus Sales
Landis & Gyr
Leeds & Northrup
Maxson Instr. Div.
Sangamo Electric
Westinghouse Electric

TOTALIZERS, Electric Energy

Autocall Co.
Autom. Electric
Bristol Co.
Engrg. & Research Corp.
Esterline-Angus
GE, Apparatus Sales
Landis & Gyr
Leeds & Northrup
Radiation Instr. Dev. Lab.
Sangamo Electric
Stewart Instr. Co.
Streeter-Amet.
Westinghouse Electric

TOTALIZERS, Fluid Flow and/or Gas Flow, see Flow Totalizers

TOTALIZERS, Running Time, see Time Recorders

TRAFFIC SIGNALING DEVICES

A'G'A' Div.
Airborne Instruments
Amglo Corp.
Autom. Electric
Autom. Temp. Control Co.
Bullard Co.
Eagle Signal Corp.
Eastern Industries, Inc.
Emarco Corp.
GE, Apparatus Sales
Kemlite Labs.
Natl. Time & Signal
Photoswitch, Inc.
Reynolds Electric
Sangamo Electric
Taller & Cooper, Inc.
Union Switch & Signal

TRAMMELS, Steel Beam

Brown & Sharpe
Lufkin Rule Co.
Starrett Co.

TRANSDUCERS. Note: A transducer converts one form of POWER into another. For numerous primary measuring devices see the correct headings under the measurables, e. g. Displacement Pickups, Flow Pickups, Pressure Pickups, etc.

TRANSDUCERS, Ultrasonic

Acoustica Assoc., Inc.
AiResearch Mfg. Co.
Andersen Labs.
Arenberg Ultrasonic Lab.
Atlantic Research
Atlas Engrg. Co.
Audio Develop.
Bendix-Pacific
Bendix, Pioneer-Central
Branson Instruments
Brush Instruments
Centralab Div.
Chesapeake Instr. Corp.
Clevite Elect. Corp.
Consol. Electrodynamics
Corbett Science Labs.
Defiance Engrg. & Mcwave
Dyna-Empire
Electro-Mec Lab.
Electro Prods. Labs.
Electronics Co.
Endevco Corp.
Fischer & Porter
GE, Apparatus Sales
Gen. Precision Lab.
General Ultrasonics Co.
Gulton Industries
Hewlett-Packard
Kin Tel
Knights Co., James
Laboratory for Electronics
Leonard, Inc., Wallace O.
Massa Div. of Cohu
Maxson Instr. Div.
Monsell, J. R.
McKenna Labs.
Moore Corp., John B.
Natl. Aircraft Corp.
Potter Aeronaut. Corp.
Premier Res. Labs.
Raytheon Mfg. Co.
Reed Res., Inc.
Rutico, Inc.
Sangamo Electric
Servomechanisms, Inc.
Smith Prods., Graydon
Sperry Products
Task Corp.
Telex, E-A Div.
Trenton Trans. Corp.
Valpey Crystal Corp.
Vibro-Ceramics

TRANSFORMERS, Adjustable, see Transformers, Variable

TRANSFORMERS, Constant Voltage (see also Voltage Regulators)

Acme Electric
Aircraft Transformer
Airdesign, Inc.
Airpax Products
Allied Radio Crop.
Allis-Chalmers
Altec Lansing
Amplifier Co.
Amplifier Corp. of Amer.
Atlas Engrg. Co.
Avion Div.
Basler Electric
Better Coils & Transf.
Boonton Radio
California Magnetic
Carad Corp.
Chicago Electronic
Chicago-Std. Transf. Corp.
Colin Campbell Co.
Cutler Hammer
Dano Electric
Davis & Co., Inc., Dear.
Del Electronics Co.
Dormeyer Industries
Electronic Transf. Co.
Electrosig Corp.
Federal Telephone
GE, Apparatus Sales
General Controls
General Radio
Goslin Electcl. & Mfg. Co.
Gramer-Halldorsen Transf.
Green Rectifier Co.
Hevi Duty Electric Co.
Jeffries Transf. Co.
KeystoneProducts
Laboratory Equip.
Magnatran, Inc.
Magnetic Amplifiers, Inc.
Magnetic Instr. Co.
Magnetic Res. Corp.
Microtran Div.
Natl. Aircraft Corp.
New London Instr. Co.
Newark Electric Co.
Osborne Electric Co.
Pacific Transducer Corp.
Peerless Div., Altec
Perkin Engrg. Co.
Ransom Electric Co.
Raytheon Mfg. Co.
Reed & Reese
Sola Electric
Sorensen & Co.
Square D Co.
Standard Elect. Prods.
Standard Transf. Corp.
Sterling Transf. Corp.
Superior Electric
Sylvania Elect. Prods.
Tartak Electronics
Thermador Electcl.
Thoardarson-Meissner
Timely Instrs. & Conts.
Tracerlab; Inc.
Transformer Engineers
Transformers, Inc.
Trenton Transf. Corp.
United StatesElectronics
United Transf. Corp.
Varo Mfg. Co.
Virginia Electronics
WacLine, Inc.
Westinghouse Electric

TRANSFORMERS, Differential, see Displacement Pickups, Differential Transformer

TRANSFORMERS, High Frequency

Acme Electric
Acro Products
Adler Electronics
Aircraft Transf. Corp.
Altec Lansing
Atlas Engrg. Co.
Audio Devel. Co.
Avion Div.
Basler Electric
Caddell-Burns Mfg.
Calif. Magnetic Cont. Corp.
Cambridge Thermionic
CGS Labs.
Chicago Electronic Engrg.
Chicago Stand. Transf.
Colin Campbell Co.
Communication Access
Del Electronics Co.
Dietz Design & Mfg.
Electronic Transformer Co.
Filtron Co., Inc.
Freed Transf. Co.
Ferranti Electric
GE, Apparatus Sales
Goslin Elect. & Mfg. Co.
Keystone Products
Lear, Inc.
Levinthal Electronic Prods.
Magnatran Inc.
Maxson Instr. Div.
Mico Instr. Co.
Microphase Corp.
Microtran Div.
Moran Electronic Comp.
Natl. Aircraft Corp.
North Hills Elect.
Osborne Electric
P & H Electronics
Polyphase Instr. Co.
Raytheon Mfg. Co.
Reed & Reese
Sangamo Electric
Spellman Television
Spencer-Kennedy Labs.
Sterling Transf. Corp.
Superior Elect.
Texas Instruments
Thermador Electcl. Mfg. Co.
Transformer Engrs.
Trenton Transf. Corp.
Triad Transf. Corp.
United States Electronics
United Transf. Corp.
Virginia Electronics
Westinghouse Electric
Wirt Company

TRANSFORMERS, Impedance

Acme Electric
Acro Products
Adler Electronics
Aircraft Transf. Corp.
Airpax Products
Atlas Engrg. Co.
Audio Devel. Co.
Avion Div.
Ballastran Corp.
Basler Electric
Better Coil & Transf.
Blonder-Tongue Labs.
Caledonic Electron & Transf.
Calif. Magnetic Cont. Corp.
Carad Corp.
CGS Labs.
Chapman Labs.
Chicago Std. Transf. Corp.
Colin Campbell Co.
Communication Access Co.
Del Electronics Co.
Dietz Design & Mfg.
Dittmore & Freimuth
Dyna-Empire
Electrical Windings
Electronic Transf. Co.
Femco, Inc.
Ferranti Electric
Freed Transf. Co.
GE, Apparatus Sales
General Controls
General Radio
Goslin Elect. & Mfg. Co.
Gramer-Haldorsen
Hansen Electronics
Hevi Duty Electric
Hycon Electronics
Hycor Div.
Keystone Products
Langevin Mfg. Co.
Magnavox Co.
Magnetic Instr. Co.
Mechaponents Div.
Merit Transf. Corp.
Mico Instr. Co.
Microtran Div.
Muirhead Instrument
Natl. Aircraft Corp.
New London Instr. Co.
N. Y. Transf. Co.
NYT Electronics, Inc.
Osborne Electric
PCA Electronics
P & H Electronics
Polyphase Instr. Co.
Raytheon Mfg. Co.
Sangamo Electric
Sorensen & Co.
Southw. Ind. Electronics
Sperry Gyroscope
Standard Transf. Corp.
Sterling Transf. Corp.
Sylvania Elect. Prods.
Telex, Inc.
Tarkak Electronics
Thermador-Electcl. Mfg.
Thordarson-Meissner
Torwico Electronics, Inc.
Transformer Engrs.
Transformers, Inc.
Trenton Transf. Corp.
Triad Transf. Corp.
United States Electronics
United Transf. Corp.
Varo Mfg. Co.
Virginia Electronics

TRANSFORMERS, Input Output, and Interstage, including AF, IF, and RF

Aeronox Corp.
Acme Electric
Acro Products Co.
Airpax Products
Airtron, Inc.
Altec Lansing Corp.
Amplifier Corp. of Amer.
Atlantic Transf. Div.
Atlas Engrg. Co.
Audio Devel. Co.
Avion Div.
Basler Electric
Better Coil & Transf.
Caledonia Electronics
Calif Magnetic Cont. Corp.

Calmag Div
Cambridge Thermionic
Carad Corp.
Carol Electronics
Chicago Std. Transf. Corp.
Colin Campbell Co.
Communication Access. Co
Del Electronics Co.
Dietz Design & Mfg
Dittmore-Freimuth Corp
Dormeyer Industries
Dormitzer Elect. & Mfg
Elcor, Inc.
Electrical Windings
Electronic Transf. Co.
Epsco, Inc
Essex Electronics
Ferranti Electric
Filtron Co., Inc.
Freed Transformer
GE, Apparatus Sales
General Instr. Co.
General Radio
General Transf. Co
Gordos Corp.
Goslin Elect. & Mfg. Co
Gramer Transf. Corp.
Gudeman Co.
Gulton Industries
Halldorson Transf. Co.
Harder Co., Donald C.
Hevi-Duty Electric
Instr. Motors
James Vibrapowr Co.
Kenyon Transf. Co
Kessler Co.
Keystone Products
LR Electronics
Lab. for Electronics
Lear, Inc.
Lenkurt Electric Co.
Lindberg Engrg. Co.
Magnavox Co.
Magnetico, Inc
Maxson Instr. Div
Mechaponents Div.
Melco Products Co.
Microtran Co., Inc
Microtran Div.
Millen Mfg. Co.
Muirhead Instrument
Munston Mfg. & Service
NYT Electronics, Inc.
Natl. Aircraft Corp.
National Co.
New York Coil Co
New York Transformer
Newark Electric Co.
North Hills Elect.
Orthro Filter Corp.
Osborne Electric Co.
P & H Electronics
Pacific Instr. Co
Pax Electronics
Peerless Div., Altec
Polyphase Instr.
Pulse Engrg., Inc.
Rattigan Electronics
Raypar, Inc.
Raytheon Mfg. Co.
Reed & Reese
Sangamo Electric
Sickles Div.
Southw. Ind. Electronics
Standard Elect. Prods.
Sterling Transf. Corp.
Stromberg-Carlson
Superior Electric Co.
Sylvania Elec. Prods.
Tartak Electronics
Tech. Material Corp.
Technical App. Builders
Technitrol Engrg.
Telex, Inc.
Texas Instruments
Thermador Electcl. Mfg
Texas Instruments
Torwico Electronics
Transformer Engrs.
Transformers, Inc.
Trenton Transf. Corp.
Triad Transf. Corp.
United States Electronics
United Transf. Corp.
Valor Electronics
Virginia Electronics
Westinghouse Elect.
Weston Instr.
Wirt Company
Wheeler Electronic Corp.

TRANSFORMERS, Instrument, including Current, and/or Potential, Laboratory

Acme Electric
Acro Products
Aircraft Transf. Corp.
Airdesign, Inc.
Airpax Products
Allied Control Co.
Allis-Chalmers
Altec Lansing Corp.
Amplifier Co.
Annis Co., R. B.
Asch Equipt. Co.
Assembly Products
Associated Research
Atlantic Transf. Div.
Atlas Engrg. Co.
Audio Devel. Co.
Avion Div.
Ballastran Corp.
Basler Electric
Bendix, Eclipse-Pioneer
Bendix-Friez
Better Coil & Transf.
Bristol Co.
Burrell Corp.
Calif. Magnetic Cont. Corp.
Carad Corp.
Central Scientific
Chapman Labs.
Chicago Electronic Engrg.
Chicago Transformer
Clough Brengle Co.
Columbia Elect. Mfg.
Communication Access. Co.
Computer Engrg.
Control Corp.
Daven Co.
Davenport Mfg.
Daystrom Instrument
Del Electronics Co.
Dietz Design & Mfg.
Dinion Coil Co.
Dittmore & Freimuth
Dormeyer Industries
Eastern Specialty Co.
Electrical Windings
Electro-Tech Equip. Co
Electro Voice, Inc.
Electronic Transformer Co.
Electronics, Inc.
Electrosig Corp.
Essex Wire Corp.
Esterline-Angus
Federal Telephone & Radio
Ferranti Electric
Freed Transformer
GE, Apparatus Sales
General Controls
General Radio
General Winding
Gorrell & Gorrell
Goslin Electric & Mfg.
Gramer-Halldorson
Hevi-Duty Electric
Hickok Electcl. Instr.
Industrial Insts. Inc.
Instrument Labs
Kenyon Transformer
Keystone Products
Knopp Inc.
Laboratory Equipt. Corp.
Langevin Mfg. Corp.
Lenkurt Electric
Magnetic Instr. Co.
Manning, Maxwell & Moore
Maxson Instr. Div.
Mechaponents Div.
Merit Transf. Corp.
Mico Instr. Co.
Microtime Labs.
Microtran Div.
Miller Transformer
Millivac Instruments
Mt. Sopris Instr. Corp.
Natl. Aircraft Corp.
NJE Corp.
New London Instr. Co.
New York Transf. Co.
Newark Electric Co.
Nothelfer Winding Labs.
Nuclear Measmts. Corp.
Osborne Electric
PCA Electronics
Peerless Div., Altec
Perkin Engrg. Co
Physics Res. Labs.
Raytheon Mfg. Co.
Roller-Smith
Sangamo Electric
Servomechanisms, Inc.
Scientific Glass App.
Sierra Electronic Corp.
Simpson Electric
Sola Electric
Sorensen & Co.
Southw. Ind. Electronics
Specialties Inc.
Sperry Gyroscope
Square D Co.
Std. Elect. Prods.
Std. Science Supply
Std. Transf. Corp.
Sterling Transf. Corp.
Stitcht Co.
Superior Electric
Sylvania Elect. Prods.
Tartak-Electronics
Texas Insts., Inc.
Thermador Electcl. Mfg. Co
Thordarson-Meissner
Torwico Electronics
Transformer Engrs.
Transformers, Inc.
Trenton Transf. Corp.
United Optical
United States Electronics
United Transf. Corp.
Universal Scientific
Varo Mfg. Co.
Virginia Electronics
Westinghouse Electric
Weston Instrs.

TRANSFORMERS, Insulation Testing

Acme Electric
Aircraft Transf. Corp
Airdesign, Inc.
Airpax Products
Associated Research
Atlas Engrg. Co.
Avion Div.
Ballastran Corp.
Basler Electric
Beta Electric Corp.
Better Coils & Transfs.
Campbell Electric
Chapman Labs.
Chicago Electronic
Davenport Mfg.
Del Electronics
Electronic Transf. Co.
Ferranti Electric
Freed Transf. Co.
General Controls
GE, Apparatus Sales
Goslin Electric & Mfg. Co.
Gramer-Halldorson
Hevi-Duty Electric
Keystone Products
Knopp Inc.
Langevin Mfg. Corp.
Lenkurt Electric
Magnatran Inc.
Magnetic Instr. Co.
NJE Corp.
NYT Electronics
New Jersey Electronics
New York Transformer
Newark Electric Co.
Opad Electric
Peschel Electronics
Precise Measmts. Co.
Scient. Inst. Dev. Lab.
Sherron Metallic
Slaughter Co.
Spellman TV Corp.
Standard Transf. Corp.
States Co.
Sterling Transf. Corp.
Superior Electric
Thermador Electcl. Mfg
Thordarson-Meissner
Transformer Engineers
Transformers, Inc.
Trenton Transf. Corp.
Triad Transf. Corp.
United Transf. Corp
Virginia Electronics

TRANSFORMERS, Isolation

A'G'A Div.
Acme Electric
Acro Products
Airpax Products
Altec-Lansing
Assembly Products
Atlantic Transf. Div.
Atlas Engrg. Co.
Audio Devel. Co.
Avion Div.
Basler Electric
Beta Electric
Better Coil & Transf.
Calif. Magnetic Cont. Corp.
Chicago Electronic Engrg.
Chicago Std. Transf. Corp.
Coast Coil Co.
Colin Campbell Co.
Communication Access.
Del Electronics
Dietz Design & Mfg.
Dormeyer Industries
Electrical Windings
Electronic Transf. Co.
Ferranti Electric
Freed Transf. Co.
GE, Apparatus Sales
General Transformer
Goslin Electric & Mfg. Co.
Gramer-Halldorson
Green Rectifier Co.
Hevi Duty Elec. Co.
Kenyon Transf. Co.
Keystone Products
Magnatran Inc.
Magnavox Co.
Mechaponents Div.
Microtran Div.
NJE Corp.
NYT Electronics, Inc.
Natl. Aircraft Corp.
New York Transformer
Opad Electric
Osborne Electric
Peerless Div., Altec
Std. Electcl. Prods.
Sterling Transf. Corp.
Texas Insts., Inc.
Thermador Electcl. Mfg. Co.
Torwico Electronics
Transformer Engrs.
Transformers, Inc.
Trenton Transf. Corp.
Triad Transf. Corp
United States Electronics
United Transf. Corp.
Viking Electric
Virginia Electronics
Westinghouse Electric
Wheeler Electronic Corp.

TRANSFORMERS, Microwave

Acme Electric
Aircraft Transf. Corp.
Altec Lansing
Atlas Engrg. Co.
Audio Devel. Co.
Avion Div.
Basler Electric
Better Coil & Transfs.
Budd-Stanley Co.
Cambridge Thermionic
Carad Corp.
Chicago Std. Transf. Corp.
Defiance Engrg. & Mcrwave
DeMornay-Bonardi
Electronic Transf. Co.
F. R. Machine Works
Freed Transf. Co.
G.E., Apparatus Sales
Goslin Electric & Mfg. Co.
Gramer-Halldorson
Hevi-Duty Electric
Hewlett-Packard
Hycon Mfg. Co.
Indus. Rectifier Devices
Kearfott Co.
Keystone Products
Lectronic Res. Labs.
Magnatran Inc.
Maxson Corp., W. L.
Microphase Corp.
Narda Microwave Corp.
Natl. Aircraft Corp.
Polytechnic Res. & Devel.
Raytheon Mfg. Co.
Sperry Gyroscope
Sorensen & Co.
Sterling Transf. Corp.
Sylvania Elec. Prods.
Thordarson-Meissner
United Transf. Corp.
Vectron, Inc.
Viking Electric
Wheeler Electronic Corp.

TRANSFORMERS, Phasing

Acme Electric
Aircraft Transf. Corp.
Airdesign, Inc.
Altec Lansing
Atlas Engrg. Co.
Audio Develop.
Avion Div.
Ballastran Corp.
Basler Electric
Better Coil & Transfs.
California Magnetic
Chapman Labs.
Chicago Ltd. Transf. Corp.
Colin Campbell Co.
Del Electronics
Eastern Spec. Co.
Electronic Transf. Co.
Esterline-Angus
Freed Transformer Co
GE, Apparatus Sales
Goslin Electric & Mfg. Co
Gramer-Halldorson
Hevi-Duty Electric
Hycon Electronics
Keystone Products
Langevin Mfg. Corp.
Magnatran Inc.
Magnetic Instr. Co
Merit Transf. Corp
Mico Instr. Co.
Microtran Co.
NYT Electronics, Inc.
Natl. Aircraft Corp.
New York Transf. Co.
Opad Electric
Osborne Electric
PCA Electronics
Raytheon Mfg. Co.
Reed & Reese
Sangamo Electric
Southw. Ind. Electronics
States Co.
Sterling Transf. Corp.
Thermador Electcl. Mfg
Thordarson-Meissner
Torwico Electronics
Transformer Engs.
Transformers, Inc.
Trenton Transf. Corp.
United Transf. Corp.
Varo Mfg. Co.
Viking Electric
Virginia Electronics
Westinghouse Electric

TRANSFORMERS, Power

AMP, Inc.
Acme Electric
Acro Products
Aircraft Transf. Corp
Airdesign, Inc.
Airpax Products
Allied Control Co
Allis-Chalmers
Altec-Lansing
Amplifier Corp. of Amer
Atlantic Transf. Div
Atlas Engrg. Co.
Audio Devel. Co.
Avion Div.
Ballastran Corp.
Basler Electric
Bendix, Eclipse-Pioneer
Better Coil & Transfs.
Caledonia Electronics
Calif. Magnetic Cont. Corp
Chapman Labs.
Chicago Electronic Engrg.
Chicago Std. Transf. Corp.
Colin Campbell Co.
Comar Electric
Communication Access. Co
Del Electronics
Dietz Design & Mfg.
Dittmore & Freimuth
Dormeyer Industries
Dormitzer Elect. & Mfg. Co
Electrical Windings
Electronic Res. Assocs.
Electronic Transf. Co.
Federal Telephone & Radio
Femco, Inc.
Ferranti Electric
Freed Transf. Co.
Gates Electronic Co.
General Controls
GE, Apparatus Sales
Goslin Elect. & Mfg. Co
Gramer-Halldorson
Green Rectifier Co.
Harder Co., Donald C.
Harvey Radio Labs.
Hevi-Duty Electric Co.
Hycor Div.
I.T.E. Circuit Breaker
James Vibrapowr Co.
Kenyon Transf. Co.
Keystone Products
Lab. for Electronics
Land-Air, Inc.
Langevin Mfg. Corp.
Lenkurt Electric
Lindberg Engrg. Co.
Macarr, Inc.
Magnavox Co.
Magnetic Amplifiers Inc
Magnetic Instr. Co
Mechaponents Div.
Merit Transf. Corp.
Microtran Div.
Mt. Sopris Instr. Corp.
Muston Mfg. & Service
NJE Corp.
NYT Electronics, Inc.
Natl. Aircraft Corp.
National Controls
National Spectrographic
New London Instr. Co.
New York Coil Co.
New York Transformer
Oltronix Co.
Opad Electric
Osborne Electric
PCA Electronics, Inc.
Perfex Corp.
Perkin Engineering
RCA Tube
Raytheon Mfg. Co
Sangamo Electric
Sciaky Bros., Inc.
Servo Corp.
Sola Electric
Soreng Products
Sorensen & Co.
Southw. Ind. Electronics
Square D Co.
Standard Transf. Corp.
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Tartak Electronics, Inc.
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Thermador Electcl. Mfg. Co
Thordarson Meissner
Torwico Electronics
Transformer Engrs.
Transformers, Inc.
Trenton Transf. Corp.
Triad Transf. Corp.

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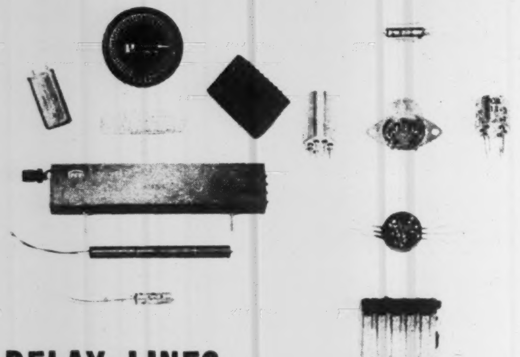

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MPT4	✓	✓		0.5/0.5	0.2-1.5	.002	2	1.0	250
MPT5	✓	✓		0.5/0.5/0.5	0.5-2.0	.002	3	1.0	500
MPT6	✓	✓		0.5/0.5	0.5-2.0	.002	2	1.0	500
MPT7	✓	✓	✓	0.7/0.7/0.7	0.5-1.5	.002	3	1.5	200
MPT8	✓	✓	✓	0.7/0.7	0.5-1.5	.002	2	1.5	200
MPT9	✓	✓	✓	1.0/1.0/1.0	0.7-3.5	.002	3	2.0	200
MPT10	✓	✓	✓	1.0/1.0	0.7-3.5	.002	2	2.0	200
MPT11	✓	✓	✓	1.0/1.0/1.0	1.0-5.0	.002	3	2.0	500
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Vibration Research Labs.
Viking Electric
Virginia Electronics
Westinghouse Electric

TRANSFORMERS, Pulse

AMP, Inc.
Acme Electric
Acro Products
Aerovox Corp.
Aircraft Transf. Corp
Airpax Products
Aladdin Electronics
Altec-Lansing
Alto Scientific
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Atlas Engrg. Co.
Audio Devel. Co.
Avion Div.
Basler Electric
Berkeley Div.
Berkshire Labs.
Better Coil & Transf.
Burroughs Electronics
Caledonia Electronics
Calif. Magnetic Cont. Corp.
Carad Corp.
Chicago Std. Transf. Corp.
Colin Campbell Co.
Communication Access. Co
Del Electronic Co.
Detectolab, Inc.
Dietz Design & Mfg.
Dilectron Div.
Dormeyer Industries
DuMont Labs., Allen B.
ESC-Corp.
Electronic Transf. Co.
Epsco, Inc.
Essex Electronics
Filtron Co., Inc.
Freed Transf. Co.
GE, Apparatus Sales
Gordos Corp.
Goslin Elect. & Mfg. Co
Gramer-Halldorson
Gudeman Co.
Hevi-Duty Electric
Hycor Company
Kenyon Transf. Co.
Keystone Products
Lab. for Electronics
Levinthal Electronic Prods.
Magnatran Inc.
Magnavox Co.
Magnetic Instr. Co.
Magnetic Res. Corp.
Microtran Div.
NJE Corp.
NYT Electronics, Inc.
Natl. Aircraft Corp.
New York Transformer
North Hills Electric
Osborne Electric
PCA Electronics
Packard Bell-Electrns. Div.
Pearson Electronics
Peerless Div., Altec
Polyphase Instr. Co
Pulse Engrg., Inc.
Ransom Research
Ratigan Electronics
Raytheon Mfg. Co.
Reed & Reese
Sangamo Electric
Sprague Electric
Sterling Transf. Corp.
Sylvania Elec. Prods.
Tech. Material Corp.
Technitrol Engrg. Co
Tektronix, Inc.
Telex, E-A Div.
Texas Insts., Inc.
Thermador Electcl. Mfg. Co.
Thordarson-Meissner
Transformer Engrs.
Transformers, Inc.
Trenton Transf. Corp.
Triad Transf. Corp.
United States Electronics
United Transf. Corp.
Valor Electronics Inc.
Viking Electric
Virginia Electronics
Westinghouse Electric
Wheeler Electronic Corp.

TRANSFORMERS, Saturable, see Amplifiers, Magnetic

TRANSFORMERS, Split Core

Acro Products Co.
Aircraft Transformer
Airdesign, Inc.
Airpax Products
Allied Radio
Altec-Lansing
Annis Co., R. B.
Assembly Products
Atlas Engrg. Co.
Audio Devel. Co.
Avion Div.
Ballastran Corp.
Basler Electric
Better Coil & Transfs.
Bristol Co.
Calif. Magnetic Cont. Corp
Carad Corp.
Chapman Labs.
Chicago Electronic
Chicago Std. Transf. Corp.
Colin Campbell Co.
Communication Access.
Del Electronics
Dietz Design & Mfg.
Electronic Transf. Co.
Esterline-Angus
Freed Transf. Co.
GE, Apparatus Sales
Goslin Elect. & Mfg. Co.
Gramer-Halldorson
H-D Elect. Co.
Hevi-Duty Electric
Kenyon Transf. Co.
Keystone Products
Knopp Inc.
Langevin Mfg. Corp.
Magnavox Co.
Magnetic Amplifiers Inc
Magnetic Instr. Co.
Mechaponents Div.
Microtran Div.
NYT Electronics, Inc.
Natl. Aircraft Corp.
National Spectrographic
New York Transf. Co.
Osborne Electric
PCA Electronics
Physics Research
Raytheon Mfg. Co.
Roller-Smith Co
Rubicon Co.
Sangamo Electric
Sorensen & Co.
Southw. Ind. Electronics
Standard Transf. Corp.
Sterling Transf. Corp.
Sylvania Elect. Prods.
Tartak-Electronics, Inc.
Thermador Electcl. Mfg. Co
Thordarson-Meissner
Transformers, Inc.
Trenton Transf. Corp.
United Transf. Corp
Viking Electric
Virginia Electronics
Wheeler Insul. Wire, Inc.

TRANSFORMERS, Ultrasonic

Acme Electric Corp.
Acoustica Assoc., Inc.
Acro Products
Airpax Products
Altec Lansing
Atlantic Transf. Div.
Atlas Engrg. Co.
Audio Devel. Co.
Avion Div.
Basler Electric
Better Coil & Transf.
Calif. Magnetic Cont. Corp
Communication Access. Co.
Corbett Science Labs.
Del Electronics Co.
Dietz Design & Mfg.
Electronic Transf. Co.
Ferranti Electric
Freed Transf. Co.
GE, Apparatus Sales
Goslin Elect. & Mfg. Co
Gramer-Halldorson
Gulton Industries
Harshaw Scientific
Hycor Div.
Kenyon Transf. Co.
Keystone Products
Massa Labs.
Mechaponents Div.
Microtran Co., Inc.
NYT Electronics
Narda Ultrasonic Corp.
Natl. Aircraft Corp.
North Hills Electric
PCA Electron
Pax Electronics
Raytheon Mfg. Co.
Sangamo Electric
Sterling Transf. Corp.
Sylvania Elec. Prods.
Texas Insts., Inc.
Thermador Electcl. Mfg. Co
Transformers, Inc.
Triad Transf. Corp.
United Transf. Corp.

TRANSFORMERS, Variable, including Auto-transformers

Acme Electric
Aerovox Corp.
Aircraft Transformer
Airdesign, Inc.
Airpax Products
Allied Control Co.
Altec Lansing
Atlas Engrg. Co
Avion Div.
Basler Electric
Better Coil & Transfs.
Burrell Corp.
Cambridge Thermionic
Carad Corp.
Chicago Electronic Engrg
Chicago Std. Transf. Corp
Coast Coil Co.
Colin Campbell Co
Crow Electri-Craft Corp.
Del Electronics
Dietz Design & Mfg.
Dormeyer Industries
Dormitzer Elect. & Mfg
Electrical Windings
Electronic Transf. Co.
Electro-Tech Equip.
Freed Transf. Co.
GE, Apparatus Sales
General Radio
General Transformer
Gramer-Halldorson
Green Rectifier Co.
Hevi-Duty Electric Co
Jeffries Transf. Co.
Keystone Products
Laboratory Equip.
Langevin Mfg. Co
Lindberg Engrg. Co
Magnatron Inc.
Microtran Div.
Natl. Aircraft Corp
Ohmite Mfg. Co
Osborne Electric
Permoflux Corp.
Perkin-Elmer Corp
Pimex, Inc.
Raytheon Mfg. Co
Slaughter Co
Sorensen & Co.
Standard Elect. Prods
Standard Piezo
Sterling Transformer
Superior Electric
Tartak Electronics
Tech. App. Builders
Tensitron, Inc.
Thermador Electcl. Mfg. Co
Thordarson-Meissner
Torwico Elects., Inc.
Tracerlab Inc.
Trenton Transf. Corp.
Triad Transf. Corp.
United States Electronics
United Transf. Corp
Virginia Electronics
Westinghouse Electric
Westinghouse, X-Ray

TRANSFORMERS, Variable, Voltage Testing

Acme Electric
Aircraft Transf. Corp.
Airdesign, Inc.
Allied Control Co.
Atlas Engrg. Co.
Avion Div
Basler Electric
Better Coil & Transformer
Calif. Magnetic Cont. Corp.
Carad Corp.
Chicago Electronic Engrg
Chicago Std. Transf. Co.
Coast Coil Co.
Del Electronics
Dormitzer Elec. & Mfg.
Electronic Transf. Co.
Electrosig Corp.
Federal Telephone
Freed Transf. Co.
GE Apparatus Sales
Genl. Photo Prods. Co.
General Radio Co.
Goslin Electric
Gramer-Halldorson
Green Rectifier Co
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Keystone Products
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Magnetic Instr. Co.
Merit Transf. Co.
Miller Transformer
Multi-Amp
Natl. Aircraft Corp.
Opad Electric
Pacific Transducer Corp.
Perkin-Elmer
Peschel Electronics, Inc.
Phen-Trols, Inc.
Precise Measmts. Co.
Raytheon Mfg. Co.
Sola Electric
Sorensen & Co.
Standard Transf. Corp.
States Co
Sterling Transf. Corp.
Superior Electric
Sylvania Elect. Prods.
Electcl. Mfg. Co.
United States Electronics
Techn. App. Builders
Tensitron, Inc.
Thermador Electcl. Mfg. Co.
Thordarson-Meissner
Trenton Transf. Corp.
United States Electronics
United Transf. Corp.
Virginia Electronics
Weston Instrs.

TRANSFORMERS, Voltage Regulating, see Transformers, Constant Voltage

TRANSISTOR TESTING SETS

Aero Electronics
Amer. Electronic Labs.
Avion Div.
Baird-Atomic
Consolidated Avionics
Cubic Corp.
Dunn Engrg.
El Mec Labs.
Electronic Measurements
Electronic Res. Assocs
Fretco, Inc.
GE, Electronics Div
Genl. Transistor Corp.
Instant Circuits Div
Kay Electric
Kahle Engrg. Co.
Magnetic Amplifiers, Inc.
Measurements Corp.
Natl. Aircraft Corp.
Naybor Labs, E. V.
Neutronics Research
Norden-Ketay
Owen Labs.
Polyphase Instr. Co
Radio City Products
Scientific Specialties
Sonex, Inc.
Strand Engrg. Co.
Transistor Application
Transval Engrg. Corp

TRANSISTORS

Amperex Electronic
Bendix, Red Bank
Bogue Electric
CBS-Hytron Div.
Centralab
Fretco, Inc.
GE, Electronics Div.
General Transistor Corp.
Hughes Prods. Div.
Industro Transistor Corp
Intelex Systems
Lansdale Tube Co.
Mallory & Co., P. R.
Minneapolis-Honeywell
Natl. Aircraft Corp.
Newark Electric Co
Opplem Co.
Pacific Semiconductors
Philco Corp.
Radio Dev. & Res.
Radio Receptor Co.
Raytheon Mfg. Co.
Shockley Transistor
Sprague Electric
State Labs., Inc.
Sylvania Elect. Prods.
Texas Insts., Inc.
Transistor Products
Transitron Electronics
Tung-Sol Electric
Westinghouse Electric

TRANSITS., Engineer's, see Surveying Instruments

TRANSITS, Pocket

Ainsworth & Sons
Berger & Sons
Dietzgen Co.
Garlynn Engrg. Co.
Graf-Apsco
Gurley, W. & L. E.
Keuffel & Esser
Leupold & Stevens
Los Angeles Scient.
Mico Instr. Co.
Suverkrop Instruments
United States Blue Print
Warren-Knight
White Co., Inc.
Wild-Heerbrugg

TRANSMITTERS, see Telemetering, also Pressure Differential Transmitters, also Temperature Transmitters, etc.

TRIMMERS, Capacitor, see Capacitors

TRIPOLI

Dixon, Inc., William
Harshaw Chemical Co.
Jadow, Inc.
Lea Mfg. Co.
Modern Tech. Supply
Newall Mfg. Co.
Rhodes & Co.
Sickles & Sons
United Shoe Mach.
Wagner Co., Inc., C. A.

TRUCK-MILEAGE RECORDERS, see Mileage Indicators

TRUCK-TIME and/or MILEAGE RECORDERS, see Mileage Indicators

TUBE FITTINGS, see Fittings

TUBE TESTERS, Electron

Allied Radio Corp.
Bendix, Cincinnati Div.
Chatham Electronics Div.
Chicago Indust. Instr. Co
Datascan, Inc.

Electronic Instr. Co.
Electronic Measmts. Corp.
Hickok Electcl. Instr. Co.
International Bus. Mach.
Jackson Electl. Instr. Co.
Kahle Engrg. Co.
Kahn & Co.
Manson Labs.
Newark Electric Co.
Optimized Devices
Philco Corp.
Precision Apparatus Co.
RCA Tube Div.
Radio City Prods.
Rheem Mfg. Co., Electrns.
Reiner Electronics
Seco Mfg. Co.
Sensitive Res. Instr.
Simpson Electric
Technical App. Builders
Transvision, Inc.
Triplett Electcl. Instr.
Victoreen Instr. Co.
Wallson Associates
Weston Instrs.

TUBE TESTING MACHINES, see Pipe and Tube Testing Machines

TUBES, Ballast, see Current Regulators

TUBES, Bolometer, see Radiation Pickups

TUBES, Cathode Ray (including display, camera and storage, etc.)

Amer. Elite Inc.
CBS-Hytron Div.
DuMont Labs., Allen B.
Edgerton, Germeshausen
Electronic Tube Corp.
Farnsworth Electronics
Ferranti Electric
GE Component Div.
GE, Cathode Ray Tube
GE, Power Tube Dept.
Haydu Brothers
Hughes Prods. Div.
Industro Transistor Corp.
Kimble Glass Co.
Lansdale Tube Co.
Newark Electric Co.
North Amer. Philips
Owens-Illinois Glass
Philco Corp.
Pioneer Electronics
Radio Corp. of Amer.
Raytheon Mfg. Co.
Stromberg Carlson
Sylvania Elect. Prods.
Tung-Sol Electric
Vacuum Tube Products
Waterman Products
Westinghouse Electric

TUBES, Discharge, Gas and Vapor, including Argon, Mercury, Neon, Sodium, etc.

Amer. Instr. Co.
Amer. Optical
Amglo Corp.
Amperex Electronic Corp.
Anton Electronic Labs.
Aristo Grid Lamp Prods.
Baird Assocs.-Atomic Instr.
Bausch & Lomb
Bendix, Eclipse-Pioneer
Bendix-Friez
Bendix, Red Bank
Bomac Labs.
Brit. Electronic Sales Co.
Bush Assocs., G. F.
Central Scientific
CGS Labs.
Chatham Electronics Div.
Continental Electric
Cooper-Hewitt
DuMont Labs., Allen B.
Edgerton, Germeshausen
Edmund Scientific
Electrons, Inc.
Ferranti Electric
Fish-Schurman
Fredericks, George
Gaertner Scientific
Gates & Co., George W.
GE Components Div.
GE, Lamp Dept.
GE, Tube Dept.
General Physical Lab.
Gordos Corp.
Greiner Glassblowing
Hanovia Chem. & Mfg. Co.
Haydu Brothers
Huggins Labs.
Industro Transistor Corp.
Intelex Systems
Jarrell-Ash
Kemlite Labs.
Lansdale Tube Co.
Leitz, Inc.
Menlo Research Lab.
Nuclear Corp. of Amer.
Owens-Illinois Glass
Pfaltz & Bauer
Pioneer Electronics
Precise Measmts. Co.
Radiation Counter Labs.
Radio Corp. of Amer.
Superior Air Prods.
Sylvania Elect. Prods.
Ultra-Violet Prods.
Uniform Tubes
United Electronics
Universal X-Ray Prods.
Vacuum-Tube Prods.
Victoreen Instr. Co.
Zeiss, Inc., Carl

TUBES, Electrometer

Amperex Electronic
Electronic Measurements
Ferranti Electric
GE Components Div.
GE, Tube Dept.
Harshaw Scientific Div.
Pioneer Electronics
Ratheon Mfg. Co.
Sylvania Elec. Prods.
Tracerlab, Inc.
United Electronics Co.
Victoreen Instr. Co.

TUBES, Electron, Vacuum

Airborne Instr. Co.
Amer. Elite, Inc.
Amperex Electronic
Amperite Co.
Anton Electronic Labs.
Backus Novelty Co.
Bendix, Eclipse Pioneer
Bendix, Red Bank Div.
Bomac Labs.
CBS-Hytron Div.
Central Scientific
Chatham Electronics Div.
Consolidated Vacuum
Continental Corp.
Continental Electric
Cooper-Hewitt
DuMont Labs., Allen B.
Dunlee Corp.
Eitel-McCullough
Electrons, Inc.
Federal Telephone & Radio
Ferranti Electric
Fredericks, George E.
GE Components Div.
GE, Electronics Div.
GE, Tube Dept.
General Scientific Corp.
Gordos Corp.
Greiner Glassblowing
Huggins Labs
Industro Transistor Corp.
Intelex Systems
Ken-Rad Tube & Lamp
Lansdale Tube Co.
Lectronic Research
Lewis & Kaufman
Litton Industries
Machlett Labs.
Magnavox Co.
Microwave Assocs., Inc.
Newark Electric Co.
North Amer. Philips
Nuclear Corp. of Amer.
Passaic Analytical Labs.
Philadelphia Scientific
Philco Corp.
Pioneer Electronics
Raytheon Mfg. Co.
RCA Tube
Ronar, Inc.
Scientific Glass App.
Sorenson & Co.
Sperry Gyroscope
Standard Arcturus
State Labs, Inc.
Sylvania Elect. Prods.
Thermosen, Inc.
Tung-Sol Electric
United Electronics
Universal X-Ray Prods.
Vacutron, Inc.
Vacuum Tube Products
Varian Assocs.
Victoreen Instr. Co.
Walker-Jamieson
Western Radiation
Westinghouse Electric
Wheelco Instr. Div.

TUBES, Geiger-Mueller (see also Counters, G-M)

Amer. Tradair Corp.
Amperex Electronic
Anton Electronic Labs.
Baird-Atomic
Beckman Instrument
Bendix Aviation
Detectolab, Inc.
Electro-Mechanical Dev. Co.
Forro Scientific
GE, Electronics Div.
General Radio
Glasscraft Co.
Instruments Inc.
Landsverk Electrometer
Leighton Labs.
NRD Instr. Co.
Newark Electric Co.
North Amer. Philips
Nuclear-Chicago
Nuclear Corp. of Amer.
Nuclear Devel. Lab.
Nuclear Electronics
Nucleonic Co. of Amer.
Pioneer Electronics
Radiation Counter Labs.
Raytheon Mfg. Co.
Sylvania Elect. Prods.
Technical Assocs.
Tracerlab Inc.
Victoreen Instr. Co.
Western Radiation Lab.
Wood Counter Lab., N.

TUBES, Glow, see Tubes, Discharge

TUBES, Ignitron

Amperex Electronic
GE Components Div.
GE, Power Tube Dept.
Industro Transistor Corp.
Lectronic Research
National Electronics
Newark Electric Co.
North Amer. Philips
Pioneer Electronics
Radio Corp. of Amer.
Sylvania Electr. Prods.
Westinghouse Electric

TUBES, Klystron

Amperex Electronics
Bendix, Red Bank
Bomac Labs.
Eitel McCullough
Ferranti Electric
GE Components Div.
GE, Power Tube Dept.
Industro Transistor Corp.
Lectronic Research
Marconi Instruments
Newark Electric Co.
Nuclear Corp. of Amer.
Polarad Electronics
Radio Corp. of Amer.
Sylvania Elect. Prods.
Techn. App. Builders
Varian Assocs.

TUBES, Lighthouse

Amperex Electronic
Bomac Labs.
Eitel-McCullough
Ferranti Electric
GE Components Div.
GE, Power Tube Dept.
Industro Transistor Corp.
Machlett Labs.
RCA Tube Div.

TUBES, Magnetron

Amperex Electronic
Bomac Labs., Inc.
Fed. Telephone & Radio
Ferranti Electric
GE Components Div.
GE, Power Tube Dept.
Haydu Brothers
Industor Transistor Corp.
Lectronic Research
Marconi Instruments
Newark Electric Co.
North Amer. Philips
Nuclear Corp. of Amer.
Sylvania Electr. Prods.

TUBES, Nessler

Ace Glass
Bellco Glass
Central Scientific
Fischer & Porter Co.
Fish-Schurman
Fisher Scientific
Greiner, Emil
Greiner Glassblowing
Hellige Inc.
Kimble Glass
Kontes Glass
LaMotte Chemical Prods.
Owen Illinois Glass
Scientific Glass App.

TUBES, Oil Centrifuge, see Oil Centrifuge Tubes

TUBES, Photosensitive including Phototubes and Photocells

Bradley Labs.
Continental Electric
De-Tec-Tronic Corp.
DuMont Labs., Allen B.
Electron-Radar Prods.
Eby Mfg. Co., Inc.
Energy Kontrols, Inc.
Farnsworth Electronics
Fredericks, George E.
G-M Labs.
GE Apparatus Sales
GE Components Div.
GE, Tube Dept.
General Scientific
Gordos Corp.
Hupp Electronics
Industro Transistor Corp.
Infrared Industries
Instr. Devel. Labs.
Intelex Systems
International Rectifier
Lectronic Research
Machlett Labs.
Newark Electric Co.
Phoenix Prec. Instr.
Photo-Crystals, Inc.
Pioneer Electronics
Precise Measmts. Co.
Precision Products
RCA Tube
Ripley Co.
Rudolph & Sons
Sylvania Elect. Prods.
Tracerlab Inc.
Vacutron, Inc.
Walker-Jamieson
Western Radiation Lab.
Worner Electronic Devices

TUBES, Pitot, see Pitot Tubes

TUBES, Polariscope

Amer. Instr. Co.
Bausch & Lomb
Central Scientific
Fecker, J. W.
Fish-Schurman
Gaertner Scientific
Hellige, Inc.
Jarrell-Ash
Koehler Instr. Co.
Precision Scientific
Rudolph & Sons, O. C.
Sargent & Co.
Scientific Glass App.

TUBES, Precision-Bore, see Tubing, Precision Bore

TUBES, Pyrometer Protection, see Thermowells

TUBES, Spectrum, see Spectrum Tubes

TUBES, Thyratron

Amperex Electronic
Bendix, Red Bank
Bomac Labs
Chatham Electronics Div.
DuMont Labs., Allen B.
Edgerton, Germeshausen
Eitel-McCullough
Electrons, Inc.
GE Components Div.
GE, Power Tube Dept.
Industro Transistor Corp.
Lectronic Research
Machlett Labs
National Electronics
Nuclear Corp. of Amer.
Radio Corp. of Amer.
Raytheon Mfg. Co.
Sylvania Electr. Prods.
Techn. App. Builders
United Electronics
Vacuum Tube Prods.

TUBES, Travelling Wave (see also Microwave Equipment)

Bomac Labs.
Eitel-McCullough, Inc.
Federal Telephone & Radio
GE, Power Tube Dept.
Martin & Co., H. S.
Raytheon Mfg. Co.
Sperry Gyroscope Div.
Sylvania Elect. Prods.

TUBES, Ultra-Violet Light, see Light Sources

TUBES, Vacuum, see Tubes, Electron, Vacuum

TUBES, Venturi, see Venturi Tubes

TUBES, Voltage Regulator, see Tubes, Discharge; also Current Regulators

TUBES, X-ray

Amer. Instr. Co.
Amperex Electronic Corp.
Corning Glass Works
Dunlee Corp.
Eureka X-Ray Tube
Ferranti Electronic
GE, X-Ray Dept.
Jarrell Ash
Kelley Koett Mfg.
Machlett Labs.
North Amer. Philips
Picker X-Ray
Ronar, Inc.
Standard Arcturus
Stoelting Co., C. H.
Tracerlab Inc.
Universal X-Ray Prods.
Westinghouse Electric
Westinghouse X-Ray Co.
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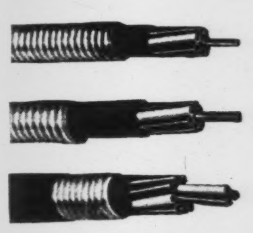
TUBING, Armored, see Tubing, Capillary Casing; also Tubing, Flexible, Multitube



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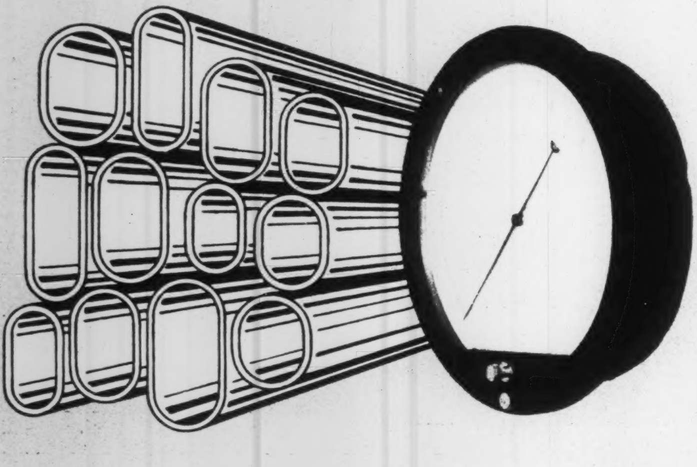

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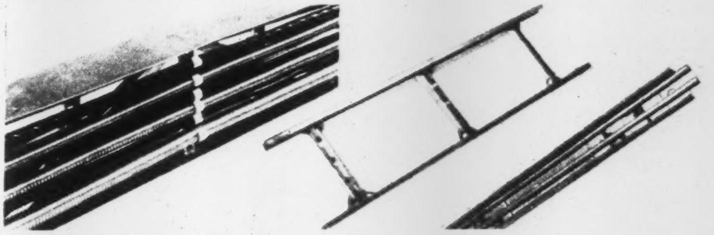

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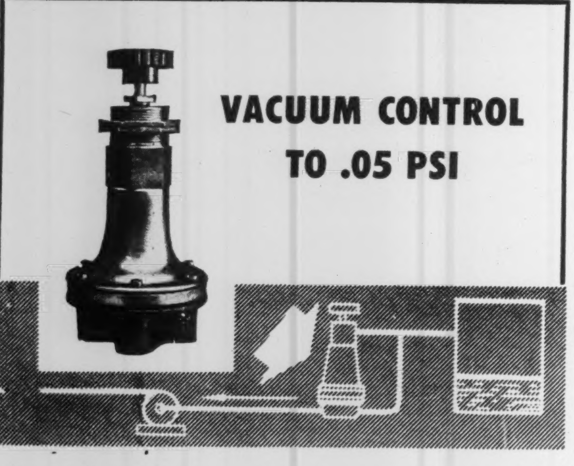

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Veeco Vacuum Corp.
Victory Engrg.
Welch Mfg. Co., W. M.
Winslow Co.

VACUUM GAGES, Ionization

Amer. Electronic Labs.
Central Scientific Co.
Consol. Electrodynamics
Consolidated Vacuum
Distillation Products
Eitel McCullough
El-Tronics, Inc.
Fredericks Co., Geo.
GE, Apparatus Sales
GE, Tube Dept.
Green Rectifier Co.
Helicoid Gage Div.
High Vacuum Equipt. Corp.
National Research
NRC Equip. Corp.
Nuclear Chicago
Nuclear Corp. of Amer.
Precision Scientific
Process & Instruments
RCA Div.
Scient. Inst. Dev. Lab.
Sierra Electronic Corp.
Stoelting Co., C. H.
Sylvania Elect. Prods.
Universal X-Ray Prods.
Vacuum Tube Prods. Co.
Veeco Vacuum Corp.
Welch Mfg. Co., W. M.
Winslow Co.

VACUUM GAGES, Liquid-column

American Meter Co.
Amthor Testing Instr. Co.
Bacharach Industrial Insts.
Bailey Meter Co.
Bristol Co.
Consolidated Vacuum
Defender Instr. & Reg.
Distillation Prods.
Dwyer Mfg. Co.
Ellison Draft Gage
Ferguson Co.
Foxboro Co.
Gas Appliance Specs.
G E
Green Rectifier Co.
Greiner Glassblowing Lab
Helicoid Gage Div.
Jerguson Gage & Valve
King Engrg. Corp.
Kontes Glass
Liquidepth Indicators
Manning, Maxwell & Moore
Meriam Instrs. Co.
Moeller Instr. Co.
Norden-Ketay
Penberthy Injector
Phoenix Prec. Instr. Co.
Precision Thermom. Co.
Scientific Glass Apparatus
Scientific Instr. Co.
Taylor Instr. Cos.
Technical Equipt. Co.
Todd Scientific
Trerice Co.
Trimount Instr. Co.
Uehling Instr. Co.
Universal X-Ray Prods.
Wallace & Tiernan
Welch Mfg. Co., W. M.
Weston Instrs.

VACUUM GAGES, McLeod

Ace Glass
Central Scientific Co.
Consol. Electrodynamics
Consolidated Vacuum
Continental Electric
Distillation Prods.
Electronic Products Co.
Ferguson Co.
GE, Tube Dept.
General Physical Lab.
Green Rectifier Co.
Greiner, Emil
Greiner Glassblowing Lab.
Hays Corp.
Helicoid Gage Div.
Kontes Glass
Macalaster Bicknell Co.
Manostat Corp.
Perfex Corp.
Phoenix Prec. Instr. Co.
Prec. Glass Prods. Co.
Radiation Inst. Dev. Labs.
Scientific Glass Apparatus
Smith Co., Arthur F.
Stoelting Co., C. H.
Stokes Mach. Co., F. J.
Todd Scientific
Universal X-Ray Prods.
Wakefield Industries
Welch Mfg. Co., W. M.

VACUUM GAGES, Molecular

GE, Apparatus Sales
Helicoid Gage Div.
Welch Mfg. Co., W. M.

VACUUM GAGES, Thermocouple

Central Scientific Co.
Consol. Electrodynamics
Consoliated Vacuum
Distillation Products
Electro-Tech Equip.
Fredericks Co., George
GE, Apparatus Sales
Green Rectifier Co.
Greiner Glassblowing Lab.
Hastings-Raydist, Inc.
Helicoid Gage Div.
High Vacuum Equipt. Corp.
Kinney Mfg. Div.
National Research
NRC Equip. Corp.
Process & Instruments
RCA Div.
Smith Co., Arthur F.
Stokes Corp., F. J.
Sylvania Elect. Prods.
Temperature Engrg.
Trerice Co., H. O.
Universal X-Ray Prods.
Vacuum Tube Prods. Co.
Veeco Vacuum Corp.
Welch Mfg. Co., W. M.
Winslow Co.

VACUUM, HIGH (below 1 mu), CONTROLLERS, INDICATORS and RECORDERS

Alfred Electronics
Askania Reg. Co.
Assembly Prods., Inc.
Bristol Co.
Consol. Electrodynamics
Consolidated Vacuum
Continental Elec. Co.
Distillation Products
Electronic Prods. Co.
Ellison Draft Gage
Fredericks Co., Geo.
Fulton Sylphon Div.
GE
General Physical Lab
Green Rectifier Co.
Greiner, Emil
High Vacuum Equipt. Corp.
NRC Equip. Corp.
Keithley Instrs., Inc.
National Research
Process & Instruments
Scient. Inst. Dev. Lab.
Shallcross Controls
Squires Co., C. E.
Stoelting Co., C. H.
Stokes Corp., F. J.
Taylor Instr. Cos.
Trerice Co., H. O.
Universal X-Ray Prods.
Vacuum Tube Prods. Co.
Veeco Vacuum Corp.
Wallace & Tiernan, Inc.
Weksler Instrs.
Weston Instrs.

VACUUM INDICATORS and/or RECORDERS

Alfred Electronics
Amer. Chain & Cable
American Meter Co.
Ashton Valve Co.
Askania Reg. Co.
Assembly Prods., Inc.
Bailey Meter Co.
Barber-Colman
Bristol Co.
Central Scientific Co.
Colvin Labs., Inc.
Conoflow Corp.
Consol. Electrodynamics
Consolidated Vacuum
Continental Electric
Defender Instr. & Reg.
DeZurik Shower Co.
Dickson Co.
Distillation Products
Dynametrics Corp.
Elect. Auto-Lite Co.
Ellison Draft Gage
Engineering Res. & Devel.
Esterline-Angus Co.
Fischer & Porter Co.
Fish-Schurman Corp.
Foxboro Co.
Fredericks Co., George
Fulton Sylphon Div.
General Controls Co.
General Physical Lab.
Green Rectifier Co.
Gotham Instr. Div.
Hagan Chem. & Controls
Hastings-Raydist Co.
Hays Corp.
Helicoid Gage Div.
High Vacuum Equipt. Corp.
Kahn & Co.
Keithley Instrs., Inc.
Kistler Instr. Co.
Kollsman Instr. Div.
Lear, Inc.
Manning, Maxwell & Moore
Marsh Corp., Jas. P.
Mason-Neilan
Meriam Instrument
Minneapolis-Honeywell
  Indust. Div.
Moeller Instr. Co.
Moore Products
NRC Equip. Corp.
National Research
Penn Insts. Div.
Potter Co.
Precision Scientific
Precision Thermom. Co.
Process & Instruments
Rawson Electrical Instr.
Republic Flow Meters
Rochester Mfg. Co.
Schauer Mfg. Co.
Schwien Engineering
Scientific Glass App.
Scientific Instr. Co.
Shallcross Controls
Star-Martin Gage Co.
Statham Labs.
Stoelting Co., C. H.
Stokes Mach. Co., F. J.
Sun Electric Corp.
Taylor Instr. Companies
Technical Equipt. Co.
Trerice Co.
Uehling Instr. Co.
U. S. Gauge Div.
Universal X-Ray Prods.
Vacuum Tube Products Co.
Veeco Vacuum Corp.
Victory Engrg.
Wallace & Tiernan
Weksler Instrs.
Weston Instrs.
Winslow Co., Inc.

VACUUM REGULATORS

Assoc. Valve & Engrg.
Bristol Co.
Cash Co., A. W.
Conoflow Corp.
Consol. Electrodynamics
Fisher Governor Co.
Foster Engrg. Co.
Fulton-Sylphon Div.
Green Rectifier Co.
Greiner, Emil
Kinney Mfg. Div.
Manostat Corp.
Mason-Neilan
Moore Products
NRC Equip. Corp.
Phillips-Drucker
Precision Scientific
Research Appliance Co.
Schade Valve Mfg.
Squires Co., C. E.
United Elect. Cont. Co.
Veeco Vacuum Corp.
Warren Engrg. Co.
Weston Instrs.

VACUUM SPECTROGRAPHS, see Spectrographs

VACUUM TUBE BRIDGES, see Bridges, Electrical, Vacuum Tube

VACUUM TUBE RELAYS, see Relays, Electronic

VACUUM TUBE VOLTMETERS

Acton Labs
Aerovox Corp.
Allied Radio Corp.
Ballantine Labs.
Barber Labs., Alfred
Beckman Instruments
Beta Electric Corp.
Boonton Electronics
Bradshaw Instruments
Burlington Instrument
Cambridge Instr. Co.
Chicago Indust. Instr. Co.
Clippard Instr. Lab.
Clough-Brengle Co.
Co-design Corp.
Columbus Products Corp.
Computer Co. of America
Daven Co.
Donner Scientific
DuMont Labs., Allen B.
Electomic Mechanisms, Inc
Electro Prods. Labs.
Electronic Dev. Lab.
Electronic Engrg.
Electronic Instr. Co.
Electronic Mfg. Co.
Electronic Measmts. Corp.
Electronic Measmts. Co.
Electro-Tech Equip.
Endevco
Federal Telephone
Feiler Engineering
Fluke Mfg. Co.
Freed Transformer
GE
General Radio Co.
Gertsch Prods., Inc.
Hewlett-Packard Co.
Hickok Elect.-Instrument
Industrial Control Co.
Industrial Test
Instrument Electronics
Jackson Elect. Co.
Jennings Radio Mfg. Corp.
Keithley Insts., Inc.
Leitch-Huard Corp.
Marconi Instruments
Measurements Corp.
Mercury Electronic Co.
Millen Mfg. Co.
Miller, M. C.
Millivac Instruments
Minnesota Electronics
Newark Electric Co.
North Atlantic Industs.
Phaostron Co.
Philco Corp.
Precise Development
Precison Apparatus Co.
Precision Electronics
Radio City Prods. Co.
RCA Tube Div.
Reiner Electronics
Scott, Inc., Hermon
Shallcross Mfg. Co.
Sherron Metallic
Sierra Electronic Corp.
Simpson Electic
Southwestern Ind. Elec.
Supreme, Inc.
Sylvania Elect. Prods.
Technology Instrument
Televiso Co.
Trio Labs., Inc.
Triplett Elect. Instr. Co.
Triumph Mfg. Co.
United Optical Mfg.
Victoreen Instrument
Western Electroc-Acoustics
Weston Instrs.
Williamson Dev.

VACUUM TUBES see Tubes, Electron, Vacuum

VALVE-OPERATING DEVICES, Electric Motor

Aeronaut Div., Robertshaw Fulton
AiResearch Mfg Co
Airmatic Valve
Allis-Chalmers
American Kloeckner
Askania-Werke, A. G
Assoc. Valve & Engrg
Automatic Controls
Autom. Timing & Controls
Baldwin-Lima Hamilton
Barber-Colman Co
Barksdale Valves
Beck Co.
Bendix Eclipse-Pioneer
Bendix, Pacific
Bristol Co.
Brooke Engrg. Co
Cameron Iron Works
Clark Cooper Co
Cleveland Controls
Climax Div
Conoflow Corp.
Continental Equip Co
Control Components Co
Counter & Control Corp
Cramer Controls Corp.
Cutler-Hammer, Inc
Defender Instr. & Reg
DeZurik Shower
Dickson Co.
Edward Valves
Fischer & Porter Co
Foxboro Co
Gap Instr. Co.
GE Apparatus Sales
General Controls Co.
GE
Gen. Regulator Corp
Hays Corp
Hydromatics, Inc
Jenkins Bros
Johnson Service Co
Jordan Co.
Keckley Co., O. C.
Lear, Inc.
Leeds & Northrup
Lumenite Electronic
Magnetic Amplifiers
Magnetic Industries
Manning, Maxwell & Moore
McAlear Mfg. Co
Minneapolis-Honeywell
Natl. Aircraft Corp.
National Controls
Penfield Mfg. Co
Philadelphia Gear Work.
Reliance Instr. Mfg. Corp
Republic Flow Meters
Robinette Co., W. C
R-S Products
Sangamo Electric
Schwien Engrg
Shallcross Controls
Shand & Jurs Co
Sparton Cont. Systems
Taller & Cooper, Inc
Techniflex Corp.
Trans-Sonic Inc.
Trerice Co., H. O
United Hydraulics
WacLine, Inc.
Western Gear
Weston Instrs.
Wheeler G. H. Mfg. Co.
Wilson & Co

VALVE-OPERATING DEVICES, Electropneumatic, see Converters, Electri-to-pneumatic

VALVE OPERATING DEVICES, Hydraulic, including Cylinder

Accessory Prods. Corp
Acme Industrial
Amer. Meas. & Control Inc
Adel Div., Gen. Metals
Aero Coupling Corp.
Aeronaut., Robertshaw-Fulton
Aeroquip Corp.
Air Associates
AiResearch Mfg.
Airmatic Valve, Inc.
Allen Co., A. K.
American Instrument
Annin Co.
Area Regulators Inc.
Askania Regulator Co
Askania-Werke, A. G.
Assoc. Valve & Engrg
Atlas Valve Co.
Atwood & Morrill
Autoclave Engrs.
Automatic Switch
Autom. Timing & Controls
B-I-F Industries
B. W. Controller
Bailey Meter
Baldwin-Lima-Hamilton
Barber Colman Co.
Barksdale Valves
Bellows Co.
Bendix, Eclipse-Pioneer
Black, Sivalls & Bryson
Bridgeport Thermostat Div
Bristol Co.
Builders-Providence
Cadillac Gage Co
Cameron Iron Works
Carruthers & Fernandez
Cash Co., A. W.
Clark Cooper Co.
Conoflow Corp.
Continental Equip Co
Controls, Inc.
Dalmo Victor Co
Defender Instr. & Reg
Denison Engineering
DeZurik Shower Co.
Douglas Automatic
Eastern Aircraft Prod
Eclipse Fuel Engr.
Emmett Mach. & Mfg. Inc
Exact Weight Scale Co.
Farris Engineering
Farris Pickering Governor
Farris Valve Corp.
Fischer & Porter Co.
Fisher Governor
Flexible Valve Corp
Ford Instrument
Foster Engrg. Co.
Fulton Sylphon Div
Galland-Henning
General Controls Co
GE
Gen. Regulator Corp
Grinnell Co., Inc
Guardian Elect. Mfg
Hagan Chem. & Controls
Hammel-Dahl
Hanna Engrg. Works
Hasko Valve & Machine
Hays Corp.
Hills-McCanna
Hunt & Son
Hydraulic Controls, Inc
Hydraulic Res. & Mfg
Hydromatics Inc
Jamesbury Corporation
Jenkins Bros.
Johnson Service Co
Keckley Co., O. C
Kieley & Mueller
Kohler Co
Lear, Inc
Ledeen Mfg. Co
Leslie Co
Leupold & Stevens
Manning, Maxwell & Moore
Mason-Neilan Regulator
McAlear Mfg. Div.
McRae Corp
Midwestern Instruments
Minneapolis-Honeywell
Moog Valve Co
Natl. Aircraft Corp.
Natural Gas Equipment
Paul Valve Co.
Penfield Mfg. Co
Perfex Div.
Philadelphia Gear Works
Phen-Trol Devices
Powers Regulator Co
Pressure Products
Republic Flow Meters
Republic Mfg. Co
Rivett Lathe & Grinder
R-K-L. Valve & Mfg. Co
R-S Prod. Corp.
Rockwell Co., W. S.
Rockwell Mfg.
Sanders Associates
Schade Valve Mfg. Co
Schutte & Koerting
Security Valve Corp
Seely Inst. Co.
Shallcross Controls
Shand & Jurs Co
Smith Co., S. Morgan
Spence Engineering
Standard Controls, Inc
Superdraulic Corp.
Swanson Engrg
Topp Industries, Inc
True-Flo Valve Div
Valvair Corp.
Vestron, Inc.
Versa Products
Vickers, Inc.
Waterman Engrg. Co
Weighing & Control Comps.
Westinghouse Air Brake
Weston Hydraulics

VALVE OPERATING DEVICES, Pneumatic, including Cylinder

Accessory Prods. Corp.
Adel Precision Products
Aeronaut Div., Robertshaw-Fulton
AiResearch Mfg. Co
Airmatic Valve, Inc.
Allen Co., A. K
Amer. Meas. & Control Inc
American Meter Co.
Annin Co.
Area Regulators, Inc
Askania Reg. Co.
Askania-Werke, A. G
Assoc. Valve & Engrg.
Atlas Valve Co.
Atwood & Morrill
Automatic Switch Co.
Autom. Timing & Controls
Bailey Meter Co
Baldwin-Lima-Hamilton
Barber-Colman Co.
Bastian-Blessing Co.
Bellows Co.
Bendix, Eclipse-Pioneer
Black, Sivalls & Bryson
Boylston Co.
Bristol Co.
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Century Instrument Co
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Davis Reg. Co
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Emmett Machine
Farris Engineering
Farris Flexible Valve
Fischer & Porter Co.
Fisher Governor Co.
Flexible Valve Corp
Foster Engrg. Co.
Friez Instrument Div.
Foxboro Co.
Fulton Sylphon Div.
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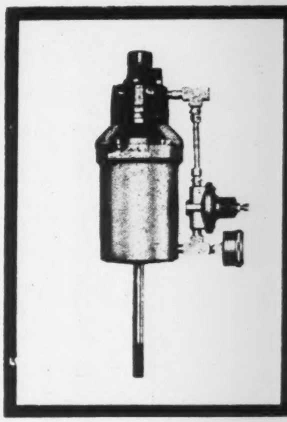
Genl. Regulators Corp
Gleason-Avery Inc
Grinnell Co., Inc.
Hammel-Dahl
Hanna Engrg. Works
Hasko Valve & Machine
Hathaway Instrument
Henry Valve Co.
Hills-McCanna
Hoke, Inc.
Hunt & Son
Hydromatics Inc.
Imperial Brass Mfg
Industrial Filter
Infilco Inc.
Jamesbury Corp
Johnson Services Co
Jordan Regulator
Keckley Co., O. C
Kieley & Mueller
Klipfel Valves
Kohler Co.
Laboratory Equipment
Larson Instrument
Ledeen Mfg. Co
Leslie Co.
Magnetrol, Inc
Manning, Maxwell & Moore
Mason-Neilan Div
McAlear Mfg.
Mead Specialties Co.
Milwaukee Gas
Minneapolis-Honeywell Indust., Div
Moore Products
Natl. Aircraft Corp.
National Pneumatic
North Amer. Mfg. Co
Partlow Corp.
Paul Valve Co.
Penfield Mfg. Co
Perfex Corp
Philadelphia Gear Works
Powers Regulator Co.
Pressure Products
Refrigerating Spec. Co
Reliance Instr. Mfg. Co
Republic Flow Meters
Research Controls
Reynolds Gas Regulator
Rivett Lathe & Grinder
R-K-L. Valve & Mfg. Co
R-S Products Corp.
Rockwell Co., W. S
Rockwell Mfg.
Rockwood Sprinkler
Ross Operating Valve Co
Schade Valve Mfg. Co
Schrader's Son, A
Schutte & Koerting
Scientific Instr. Co
Security Valve Corp
Seely Inst. Co., Inc
Shallcross Controls
Smith Co., S. Morgan
Soreng Products
Spence Engrg. Co
Stratos Div.
Swanson Engrg
Swartwout Co
Taylor Instr. Cos
Trerice Co
True-Flo Valve Div
Uniflow Valve Corp.
Valv-Trol Co
Valvair Corp.
Watts Regulator
Westinghouse Air Brake Co
Weston Instrs.
Weston Hydraulics
White Indust. Div.; S. S.
White-Rodgers Electric

VALVE OPERATING DEVICES, Solenoid

Accessory Prods. Corp
Adel Div., Gen. Metals
Aeronaut., Robertshaw-Fulton
AiResearch Mfg. Co
Airmatic Valve
Alco Valve Co.
Allen Co., A. K
A-P Controls Corp
Askania Reg. Co
Assoc. Valve & Engrg
Atkomatic Valve Co
Atlas Valve Co
Atwood & Morrill
Automatic Switch Co
Autom. Timing & Controls
Baldwin-Lima-Hamilton
Barber-Colman Co
Baso, Inc.
Bellows Co
Bendix Aviation Corp
Black, Sivalls & Bryson
Bridgeport Thermostat Div.
Bristol Co.
Carruthers & Fernandez
Clark Cooper Co.
Clark Controller Co.
Conoflow Corp.
Consol. Controls Corp
Continental Equipt. Co
Continental Foundry
Control Components Co.
Cook Electric
Davis Reg. Co.
Denison Engineering
DeZurik Shower Co
Distillation Products
Eastern Aircraft Prods
Eclipse Fuel Engrg. Co
Emmett Machine
Erickson Specialty
Exact Weight Scale Co
Fischer & Porter Co.
Frick Co.
Friez Instument Div
Galland-Henning
General Controls Co.
GE Apparatus Sales
Gleason-Avery, Inc
Gordon Co., Claud S
Gould Co., J. D.
Grove Regulator & Valve
Guardian Elect. Mfg.
Hanna Engrg. Works
Hannifin Mfg. Co.
Hays Corp.
Hays Mfg. Co.
Henry Valve Co.



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The book is a report of the Heidelberg Meeting, September 25 to 29, 1956, arranged by the VDI/VDE-Fachgruppe Regelungstechnik with the cooperation of the Fachausschuss Regelungsmathematik der Gesellschaft fuer angewandte Mathematik and Mechanik (GAMM); edited by Gerd Mueller for VDI/VDE-Fachgruppe Regelungstechnik.

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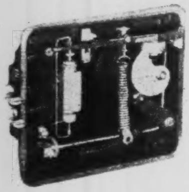

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Keckley Co., O. C.
Kieley & Mueller
Kohler Co.
Ledeen Mfg. Co
Leslie Co.
Magnatrol Valve Corp.
Magnetic Industries
Manning, Maxwell & Moore
Marsh Corp., Jas. P.
McDonnell & Miller, Inc
McRae Corp.
Midwestern Instrument
Milwaukee Gas
Minneapolis-Honeywell
Moog Valve
Natl. Aircraft Corp.
National Pneumatic
New England Gear Wks.
Northern Equipt. Co
P-K Valve Co
Parker-Hannifin Corp
Partlow Corp.
Pegasus Labs.
Penfield Mfg. Co.
Perfex Corp.
Preferred Utilities
Revere Corp.
R K.L. Valve
Robertshaw-Fulton Controls
Rockwell Co., W. S.
Ross Operating Valve
R-S Prod. Corp.
Sarco Co., Inc.
Schade Valve Mfg. Co.
Schrader's Son, A.
Schutte & Koerting
Schwien Engrg.
Security Valve Corp.
Seely Inst. Co., Inc.
Shallcross Controls
Smith Co., S. Morgan
Sparton Cont. Systems
Spence Engrg. Co
Square D Co.
Squires Co., C. E.
Sterling Engrg. Co
Sunstrand Machine Tool
Superdraulic Corp.
Synchro-Start Prods
Taller & Cooper, Inc
Taylor Instr. Cos
Topp Industries, Inc
Trerice Co.
Vacuum Elec. Engr.
Vacuum Research Co
Valvair Corp.
Veeco Vacuum Corp
Vickers, Inc.

Waterman Engrg. Co
Westinghouse Air Brake Co
Weston Instrs.
Weston Hydraulics
White-Rodgers Elect. Co.
Yellow Springs Instrument

VALVE POSITIONERS

AiResearch Mfg. Co.
Allard Instr. Corp.
Amer. Meas. & Control, Inc.
Annin Co.
Askania Reg. Co.
Atlas Valve Co.
Autom. Timing & Controls
B-I-F Industries
Bailey Meter Co.
Barber-Colman
Bristol Co.
Builders-Providence
Cleveland Controls
Conoflow Corp.
Consol. Controls Corp.
Crescent Engrg. & Res. Co
Dahl Co., Inc., G. W.
DeZurik Shower Co.
Farris Flexible Valve
Fischer & Porter Co.
Fisher Governor Co.
Foxboro Co.
General Controls Co.
General Regulator
Hagan Chem. & Controls
Hammel-Dahl
Hanna Engrg. Works
Hays Corp.
Heat-Timer Corp
Johnson Service Co
Jordan Co.
Ledeen Mfg. Co
Magnetic Amplifiers
Magnetic Industries
Manning, Maxwell & Moore
Mason-Neilan Div.
Minneapolis-Honeywell
 Indust. Div.
Moog Valve Co.
Moore Products Co.
National Controls
Penn Insts. Div.
Philadelphia Gear Works
Powers Regulator Co.
Republic Flow Meters
Scientific Instr. Co.
Shallcross Controls
Stratos Div.
Superdraulic Corp.
Swartwout Co
Taylor Instr. Cos.
Techniflex Corp.
Tejas Engrg. Corp.
United Hydraulics
Weighing & Control Comps
Weston Instrs.
Westinghouse Air Brake Co

VALVE POSITION REMOTE INDICATORS

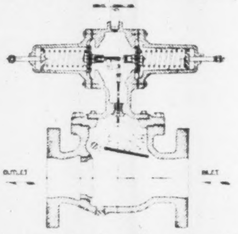
Aeronaut., Robertshaw-
 Fulton
Airmatic Valve
Allis-Chalmers
Annin Co.
Atlas Valve Co.
Autocall Co.
Automatic Control Co
Autom. Timing & Controls
B-I-F Industries
Bailey Meter Co.
Barber Coleman
Beck Co.
Black, Sivalls & Bryson
Bristol Co.
Builders-Providence
Colvin Labs., Inc.
Conoflow Corp.
Consol. Controls Corp
Crescent Engrg. & Res. Co
Cutler-Hammer, Inc.
DeZurick Shower Co
Doelcam Div.
Elec. Indicator Corp.
Elec. Tachometer Corp
Femco, Inc.
Fisher Governor Co.
Foxboro Co.
General Controls
G.E., Apparatus Sales
Gen. Regulator Corp.
Hagan Chem. & Controls
Hammel-Dahl
Hays Corp.
Heat-Timer Corp.
Johnson Service Co.
Jordan Co.
Kearfott Co., Inc.
Kieley & Mueller
Kybernetes Corp.
Lear, Inc.
Leupold & Stevens
Liquidometer Corp.
Magnetic Industries
Mason-Neilan Div.
Minneapolis-Honeywell
 Indust. Div.
Moore Products
North American Insts
Northern Equipment Co.
Panellit, Inc.
Philadelphia Gear Works
Republic Flow Meters
Robertshaw-Fulton Controls
Scam Instrument
Shand & Jurs Co.
Sparton Cont. Systems
Superdraulic Corp.
Taylor Instr. Cos.
Tejax Eng. Corp.
Uniflow Valve
Westinghouse Electric
Weston Instrs.

VALVES, Automatic Shutoff, including Fuel Shutoff

Accessory Prods. Corp.
Aero Supply Mfg. Co.
Aeronaut, Robertshaw-
 Fulton
AiResearch Mfg. Co
Airmatic Valve
American Meter Co
Annin Co.
A-P Controls Corp.
Askania Reg. Co.
Assoc. Valve & Engr. Co.
Atkomatic Valve
Atlas Valve Co.
Atwood & Morrill
Autom. Switch Co.
Autom. Timing & Controls
Autom. Valve Controller
Automation Prods., Inc.
Barber-Colman Co.
Barksdale Valves
Baso, Inc.
Bastian-Blessing
Black, Sivalls & Bryson
Bristol Co.
Carruthers & Fernandez
Cash Co., A. W.
Cash Valve Mfg. Corp.
Clark Cooper Co
Continental Equipt. Co
Cutler-Hammer
Dahl Co., G. W.
Davis Reg. Co
DeZurik Shower Co.
Douglass Automatic
Eastern Aircraft Prods.
Eclipse Fuel Engrg. Co
Edison Co., Thomas A.
Edward Valves, Inc
Electronics Corp. of Amer.
Exact Weight Scale Co.
Farris Engineering
Farris Flexible
Fisher Governor Co.
Fischer & Porter Co.
Flexible Valve Corp.
Foster Engrg. Co.
Frick Co.
Friez Instrument
Fulton Sylphon Div.
Gar Prec. Parts, Inc.
Gas Appliance Specialties
General Combustion Corp.
General Controls Co.
Golden Anderson
Gould Co., J. D.
Grove Regulator
Hammel-Dahl
Hasko Valve & Machine
Hawk Tool & Eng. Co.
Heat-Timer Corp.
Henry Valve Co.
Hetherington & Berner
Hills-McCanna
Hydromatics Inc.
Imperial Brass
Jackes-Evans Mfg.
James-Pond-Clark
Jerguson Gage
Johnson Service
Jordan Regulator Corp.
Kahn & Co.
Keckley Co., O. C.
Kieley & Mueller
Klipfel Valves

THERE IS A *Security* AUTOMATIC SHUT-OFF VALVE FOR EVERY REQUIREMENT

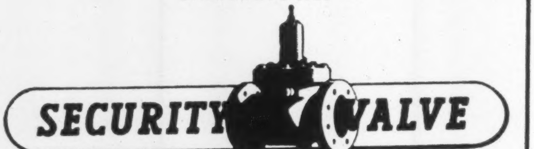
Security Valves will provide automatic shut-off in the event of increase in pressure, decrease in pressure, or on pressure differential. Solenoid controls for remote control furnished as required. May be actuated by direct line pressure or by static line control. Manual reset for oil, gas, or chemical service in accordance with API and ASME specs.



MODEL "IDPS-H"
(closes on Increase OR Decrease in Pressure; Static line control. High pressure application). Described in detail in Bulletin 227-C.

Write for New Comprehensive Bulletin

SECURITY VALVE CORP.
541 W. GARFIELD, GLENDALE 4, CALIF.
CHAPMAN 5-5725



For more information circle **357** on inquiry card.

Kohler Co.
Leslie Co.
Lonergan Co.
Magnatrol Valve
Magnetic Industries
Mason-Neilan Div.
McAlear Mfg.
Metal Goods Corp.
Minneapolis-Honeywell
Natl. Aircraft Corp.
National Controls
Natural Gas Equipt.
North Amer. Mfg. Co.
OPW Corp.
P-K Valve Co.
Partlow Corp.
Penn Electric Switch
Pennsylvania Pump
Petrometer Corp.
Power Engrg. & Equipt.
Preferred Utilities
Propulsion Dev. Labs.
Republic Mfg. Co.
Research Controls
Revere Corp.
Reynolds Gas Reg. Co.
R. K. L. Valve & Mfg. Co
Robbins Aviation
Rockwell Co., W. S
Rockwell Mfg. Co
Ross Operating Valve
R-S Prod. Corp.
Schade Valve Mfg. Co
Schrader's Son, A.
Schutte & Koerting
Security Valve Corp.
Seely Inst. Co., Inc.
Selas Corp. of Amer.
Shand & Jurs Co.
Simmonds Aerocessaries
Skinner Elect. Valve Div
Smith Co., S. Morgan
Snap-Tite, Inc.
Spence Engineering Co
Sprague Engrg. Corp
Squires Co., C. E.
Straham Valves
Trerice Co., H. O
True-Flo Valve Div.
Uniflow Valve
Vacuum Research Co
Valco, Inc.
Valcor Engrg. Corp
Valvair Corp.
Valv-Trol Co.
Vapor Recovery Systems
Versa Prods. Co., Inc.
Viking Instr. Co.
Watts Regulator Co.
Weatherhead Co.
W-K-M Mfg. Co.

VALVES, Bellows Seal, see Valves, Packless

VALVES, Butterfly

Accessory Prods. Corp.
Aero Supply Mfg. Co
Aeronaut., Robertshaw-
 Fulton
AiResearch Mfg. Co
Atwood & Morrill
B-I-F Industries
Baldwin-Lima-Hamilton
Black, Sivalls & Bryson
Century Controls Corp.
Conoflow Corp.
Consol. Controls Corp.
Continental Equipment
Dahl Co., G. W.
Davis Regulator
Eclipse Fuel Engrg. Co
Fisher Governor Co.
Foxboro Co.
Futurcraft Corp
Hammel-Dahl Co.
Hasco Valve & Machine
Haveg Industries
Johnson Service Co.
Kieley & Mueller
Mason-Neilan Div.
Minneapolis-Honeywell
 Indust. Div.
Natl. Aircraft Corp
National Controls
Republic Flow Meters
Rockwell Co., W. S
Schutte Koerting
Smith Co., S. Morgan
Stratos Div.

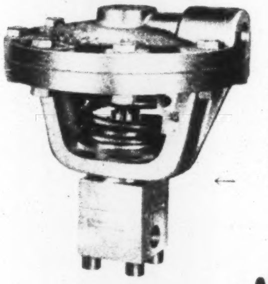
VALVES, Constant Pressure

A-P Controls Corp
Accessory Prods. Corp
Air Associates
AiResearch Mfg. Co
Airmatic Valve
Alco Valve
Annin Co.
Askania Reg. Co.
Assoc. Valve & Engrg
Atlas Valve
Atwood & Morrill
Autom. Switch Co.
Bailey Meter Co.
Bastian-Blessing
Black, Sivalls & Bryson
Bristol Co.
Cadillac Gage Co.
Cash Co., A. W.
Cash Valve Mfg. Corp
Conoflow Corp.
Continental Equip. Co
Cooper Co., Clark
Cutler Hammer
Davis Reg. Co.
Defender Instr. & Reg
Dennison Engineering
Eastern Aircraft Prods
Eclipse Fuel Engrg. Co.
Electronic Communication
Fisher Governor Co.
Foster Engrg. Co
Fulton-Sylphon Div
Gadgets, Inc.
General Controls
Golden-Anderson
General Regulators
Greiner, Emil
Grove Valve & Regulator
Hammel-Dahl
Henry Valve Co
Hoke, Inc.
Ideal-Aerosmith
Indust. Engrg. Corp
Jenkins Bros
Jordan Regulator Corp
Kates Co., W. A.
Kieley & Mueller
Klipfel Valves
Leslie Co
McAlear Mfg. Co
Mercon Regulator
Minneapolis-Honeywell
Moog Valve
Natl. Aircraft Corp.
Natural Gas Equipment
Newmatic Corp.
Powers Regulator Co
Republic Mfg. Co
Reynolds Gas Reg. Co
R.K.L. Valve & Mfg. Co
R-S Prods. Corp
Rockwell Co. W. S.
Robbins & Assocs.
Sanders Associates
Schade Valve Mfg. Co
Schutte & Koerting
Seely Inst. Co.
Simplex Valve & Meter Co
Smith Co., S. Morgan
Spence Engrg. Co
Squires Co., C. E.
Stratos Div.
Superdraulic Corp
Swartwout Co.
Taylor Instr. Cos.
Trerice Co. H. O.
True-Flo Valve Div.
Uniflow Valve Corp
Vickers, Inc.
Wallace & Tiernan
Warren Engrg. Co
Watts Regulator Co
Weston Instrs.

VALVES, Control, Electrically-operated

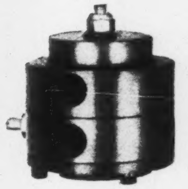
Aero Supply Mfg. Co
Aeronaut, Robertshaw-
 Fulton
AiResearch Mfg. Co
Airmatic Valve, Inc.
Alco Valve Co.
Allen Co., A. K.
Amer Meas. & Control, Inc.
American Valve Co.
Annin Co.

MINIATURIZATION From Pilot Plant to Process



"BANTAM" 500 SERIES VALVE

Throttling Bantam Diaphram Control Valves for all standard control valve uses. Cv of 0.6 and below, up to 1000 psi and 500 F, characterized, renewable trim, 316 stainless steel and *Teflon* only wetted surfaces, low in hysteresis size and weight, 2000 series Bantam Control Valves available for on-off service.



"MITE" 70

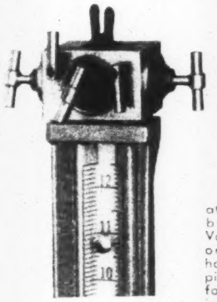
Pneumatic signal monitor. Embodies safety trip-out with manual or remote pneumatic reset. 250 PSI maximum pressure with trip adjustment for lock-up or vent from 1 to 100 PSI. Standard materials blue anodized aluminum. Other materials and models with integral two or three-way valves available.

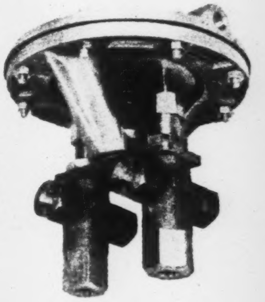
"DEMI" PACKLESS VALVE

For services when packing is a problem, manifolding of small valves in one unit at low cost. For services up to 750 psi and 500°F, screw, toggle, or diaphragm operated, the "DEMI" line is ideal for panel mounting up to five valves in one block.

"DEMI 54"

5 Valve Manifold for integral mounting on cleanout type Manometer. Packless design, 2 shut off valves, one bypass valve, 2 vent valves. Other 3 or 5 valve models available with or without special manometer mounting.



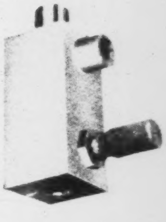


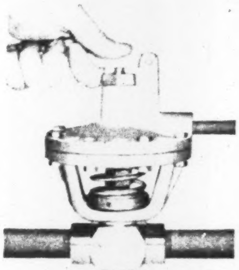
WHIFFLETREE OPERATOR

Two valves operated simultaneously by one operator. Valves may be globe or three-way and have a multitude of piping arrangements for mixing and routing applications.

CONSTANT VOLUME REGULATOR

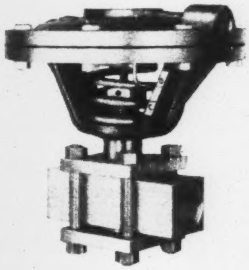
Fully automatic regulation provides constant volume output of gas or air regardless of fluctuating pressure drop. Capacity control by micrometer adjustment assures accuracy of desired output volume from 5.0 to 180 SCFH at pressure differentials from 1 to 25 PSI. Brass Body.





MANUAL RESET

Wherever control air on dangerout or toxic process flows must be blocked for safety, on air failure until manually reset, these valves insure against disaster. Standard sizes ¼" and ½" I.P.S.

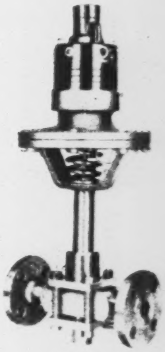


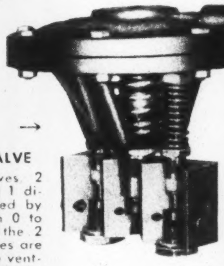
AIR OPERATED CONTROL VALVE

Miniature diaphragm operated control valve. Barstock construction with bolted bonnet and blindhead. Connections from ¼" to 1" NPT. Cv. from .001 to 10.0. Direct or reverse acting operators for control applications. Extension bonnets for extreme temperatures available.

THROTTLING CONTROL VALVES WITH TOP MOUNTED MOORE POSITIONER

Compact, accurate and rugged. Light weight. Sizes from ¼" to 1" NPT. Flanged connections available. Barstock bolted bonnet, blindhead and body. Cv. from .001 to 10.0 with pressures to 1000 PSI.



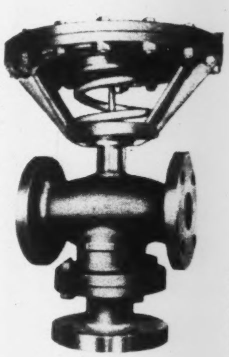


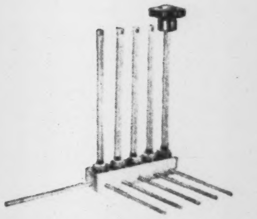
BLOCK VENT VALVE

3 balanced valves. 2 reverse acting and 1 direct acting, actuated by one operator. With 0 to 3 psi control air, the 2 reverse acting valves are closed, center valve vented. At 6 psi control air, all valves closed. At 12 to 15 psi, the 2 reverse acting valves are open and the vent valve is closed, allowing free flow through body. Design pressure 1000 psi. *Teflon*, Chevron packing. *Teflon* seating for tight shut off.

DIAPHRAGM OPERATED 3-WAY CONTROL VALVE

Aluminum diaphragm operator, stainless steel body and trim, *Teflon* packing with *Teflon* seating for tight shut off. Available up to 2", flanged or screwed.





MINIMUM VOLUME MANIFOLD

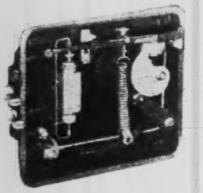
A compact manifold consisting of five packless valves having .0006 cubic inches volumetric displacement. Can be cam actuated for programming applications. Soldered, welded, tubing or NPT connections with applicable materials of manufacture for high temperature and high pressure service.

REPRESENTATIVES IN PRINCIPAL CITIES

Write us for complete technical information, or for the address of our representative in your area.

GEORGE W. DAHL COMPANY, INC. 86 TUPELO STREET, BRISTOL, R. I.

For more information circle **358** on inquiry card.



BAILEY
POSITIONING
RELAY

- Accurately positions a control valve or drive to the control requirements as received pneumatically from the control station. Also included is a cam adjustment for tuning valve or drive characteristics to system characteristics. This unit is ideally suited for control of flow characteristics of regulating devices.

Standard SAMA signal ranges of 3-15 psig or 3-27 psig.

Relay is direct or reverse acting and suitable for top or bottom connected valves. Six pre-shaped cams are supplied for square root, linear, square, and half-travel regulating characteristics.

Request Product Specification P99-5.

BAILEY METER COMPANY
1041 IVANHOE ROAD CLEVELAND, O.
Bailey Meter Company Ltd., Montreal, Canada

For more information circle **356** on inquiry card.

Hetherington & Berner
Hills-McCanna
Hunt & Son
Hydraulic Controls
Hydraulic Res. & Mfg
Hydromatics, Inc.
Instrument Dev. Labs
Intercontinental Dynamics
International Instrument
Johnson Corp.
Johnson Service
Keckley Co., O. C.
Kieley & Mueller
Kohler Co.
Ledeen Mfg. Co.
Leslie Co.
Magnatrol Valve Corp.
Magnetic Industries
Manning, Maxwell & Moore
Marsh Corp., Jas. P.
McDonnell & Miller, Inc
McRae Corp.
Midwestern Instrument
Milwaukee Gas
Minneapolis-Honeywell
Moog Valve
Natl. Aircraft Corp.
National Pneumatic
New England Gear Wks.
Northern Equipt. Co
P-K Valve Co
Parker-Hannifin Corp.
Partlow Corp.
Pegasus Labs.
Penfield Mfg. Co.
Perfex Corp.
Preferred Utilities
Revere Corp.
R.K.L. Valve
Robertshaw-Fulton Controls
Rockwell Co., W. S.
Ross Operating Valve
R-S Prod. Corp.
Sarco Co., Inc.
Schade Valve Mfg. Co.
Schrader's Son, A.
Schutte & Koerting
Schwien Engrg.
Security Valve Corp.
Seely Inst. Co., Inc.
Shallcross Controls
Smith Co., S. Morgan
Sparton Cont. Systems
Spence Engrg. Co
Square D Co.
Squires Co., C. E.
Sterling Engrg. Co
Sunstrand **Machine** Tool
Superdraulic Corp.
Synchro-Start Prods
Taller & Cooper, Inc
Taylor Instr. Cos.
Topp Industries, Inc.
Trerice Co.
Vacuum Elec. Engr.
Vacuum Research Co
Valvair Corp.
Veeco Vacuum Corp
Vickers, Inc.

Waterman Engrg. Co
Westinghouse Air Brake Co
Weston Instrs.
Weston Hydraulics
White-Rodgers Elect. Co
Yellow Springs Instrument

VALVE POSITIONERS

AiResearch Mfg. Co.
Allard Instr. Corp.
Amer. Meas. & Control, Inc.
Annin Co.
Askania Reg. Co.
Atlas Valve Co.
Autom. Timing & Controls
B-I-F Industries
Bailey Meter Co.
Barber-Colman
Bristol Co.
Builders-Providence
Cleveland Controls
Conoflow Corp.
Consol. Controls Corp.
Crescent Engrg. & Res. Co
Dahl Co., Inc., G. W.
DeZurik Shower Co.
Farris Flexible Valve
Fischer & Porter Co.
Fisher Governor Co.
Foxboro Co.
General Controls Co.
General Regulator
Hagan Chem. & Controls
Hammel-Dahl
Hanna Engrg. Works
Hays Corp.
Heat-Timer Corp
Johnson Service Co
Jordan Co
Ledeen Mfg. Co
Magnetic Amplifiers
Magnetic Industries
Manning, Maxwell & Moore
Mason-Neilan Div.
Minneapolis-Honeywell
Indust. Div
Moog Valve Co.
Moore Products Co.
National Controls
Penn Insts. Div
Philadelphia Gear Works
Powers Regulator Co.
Republic Flow Meters
Scientific Instr. Co.
Shallcross Controls
Stratos Div.
Superdraulic Corp.
Swartwout Co
Taylor Instr. **Cos.**
Techniflex Corp.
Tejax Engrg. Corp.
United Hydraulics
Weighing & Control Comps
Weston Instrs.
Westinghouse Air Brake Co

VALVE POSITION REMOTE INDICATORS

Aeronaut., Robertshaw-Fulton
Airmatic Valve
Allis-Chalmers
Annin Co.
Atlas Valve Co.
Autocall Co.
Automatic Control Co
Autom. Timing & Controls
B-I-F Industries
Bailey Meter Co.
Barber Coleman
Beck Co.
Black, Sivalls & Bryson
Bristol Co.
Builders-Providence
Colvin Labs., Inc.
Conoflow Corp.
Consol. Controls Corp
Crescent Engrg. & Res. Co
Cutler-Hammer, Inc.
DeZurick Shower Co
Doelcam Div.
Elec. **Indicator** Corp.
Elec. **Tachometer** Corp
Femco, Inc.
Fisher Governor Co.
Foxboro Co.
General Controls
G.E., **Apparatus Sales**
Gen. Regulator Corp.
Hagan Chem. & Controls
Hammel-Dahl
Hays Corp.
Heat-Timer Corp.
Johnson Service Co.
Jordan Co.
Kearfott Co., Inc.
Kieley & Mueller
Kybernetes Corp.
Lear, Inc.
Leupold & Stevens
Liquidometer Corp
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Mason-Neilan Div.
Minneapolis-Honeywell
Indust. Div.
Moore Products
North American Insts
Northern Equipment Co.
Panellit, Inc.
Philadelphia Gear Works
Republic Flow Meters
Robertshaw-Fulton Controls
Scam Instrument
Shand & Jurs Co.
Sparton Cont. Systems
Superdraulic Corp.
Taylor Instr. Cos.
Tejax Eng. Corp.
Uniflow Valve
Westinghouse Electric
Weston Instrs.

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Aeronaut, Robertshaw-Fulton
AiResearch Mfg. Co
Airmatic Valve
American **Meter** Co
Annin Co.
A-P Controls Corp.
Askania Reg. Co.
Assoc. Valve & Engr. Co.
Atkomatic Valve
Atlas Valve Co.
Atwood & Morrill
Autom. Switch Co.
Autom. Timing & Controls
Autom. Valve Controller
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Barber-Colman Co.
Barksdale Valves
Baso, Inc.
Bastian-Blessing
Black, Sivalls & Bryson
Bristol Co.
Carruthers & Fernandez
Cash Co., A. W.
Cash Valve Mfg. Corp.
Clark Cooper Co
Continental Equipt. Co
Cutler-Hammer
Dahl Co., G. W.
Davis Reg. Co
DeZurik Shower Co
Douglass Automatic
Eastern Aircraft Prods.
Eclipse Fuel Engrg. Co
Edison Co., Thomas A.
Edward Valves, Inc
Electronics Corp. of Amer.
Exact Weight Scale Co.
Farris Engineering
Farris Flexible
Fisher Governor Co.
Fischer & Porter Co.
Flexible Valve Corp.
Foster Engrg. Co.
Frick Co.
Fries Instrument
Fulton Sylphon Div.
Gar Prec. Parts, Inc.
Gas Appliance Specialties
General Combustion Corp.
General Controls Co.
Golden Anderson
Gould Co., J. D.
Grove Regulator
Hammel-Dahl
Hasko Valve & Machine
Hawk Tool & Eng. Co.
Heat-Timer Corp.
Henry Valve Co.
Hetherington & Berner
Hills-McCanna
Hydromatics Inc.
Imperial Brass
Jackes-Evans Mfg.
James-Pond-Clark
Jerguson Gage
Johnson Service
Jordan Regulator Corp.
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Keckley Co., O. C.
Kieley & Mueller
Klipfel Valves

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FOR EVERY REQUIREMENT

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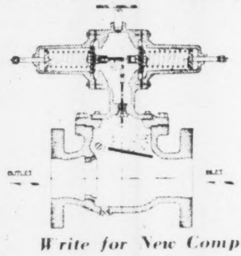

MODEL "IDPS-H"
(closes on Increase OR Decrease in Pressure; Static line control. High pressure application). Described in detail in Bulletin 227-C.

Write for New Comprehensive Bulletin

SECURITY VALVE CORP.
541 W. GARFIELD, GLENDALE 4, CALIF.
CHAPMAN 5-5725

SECURITY VALVE

For more information circle **357** on inquiry card.

Kohler Co.
Leslie Co.
Lonergan Co.
Magnatrol Valve
Magnetic Industries
Mason-Neilan Div.
McAlear Mfg.
Metal Goods Corp.
Minneapolis-Honeywell
Natl. Aircraft Corp
National Controls
Natural Gas Equipt.
North Amer. **Mfg.** Co.
OPW Corp.
P-K Valve **Co.**
Partlow Corp.
Penn Electric Switch
Pennsylvania Pump
Petrometer Corp.
Power Engrg. & Equipt.
Preferred Utilities
Propulsion Dev. Labs.
Republic Mfg. Co
Research Controls
Revere Corp.
Reynolds Gas Reg. Co.
R. K. L. Valve & **Mfg.** Co
Robbins Aviation
Rockwell Co., W. S
Rockwell Mfg. Co
Ross Operating Valve
R-S Prod. Corp.
Schade Valve Mfg. Co
Schrader's Son, A.
Schutte & Koerting
Security Valve Corp.
Seely Inst. Co., Inc.
Selas Corp. of Amer.
Shand & Jurs Co.
Simmonds Aerocessaries
Skinner Elect. Valve Div
Smith Co., S Morgan
Snap-Tite, Inc.
Spence Engineering Co
Sprague Engrg. Corp
Squires Co., C. E.
Straham Valves
Trerice Co., H. O
True-Flo Valve Div.
Uniflow Valve
Vacuum Research Co
Valco, Inc.
Valcor Engrg. Corp
Valvair Corp.
Valv-Trol Co.
Vapor Recovery Systems
Versa Prods. Co., Inc.
Viking Instr. Co.
Watts Regulator Co.
Weatherhead Co.
W-K-M Mfg. Co.

VALVES, Bellows Seal, see Valves, Packless

VALVES, Butterfly

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Aeronaut., Robertshaw-Fulton
AiResearch Mfg. Co
Atwood & Morrill
B-I-F Industries
Baldwin-Lima-Hamilton
Black, Sivalls & Bryson
Century Controls Corp.
Conoflow Corp.
Consol. Controls Corp.
Continental Equipment
Dahl Co., G. W.
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VALVES, Constant Pressure

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VALVES, Control, Electrically-operated

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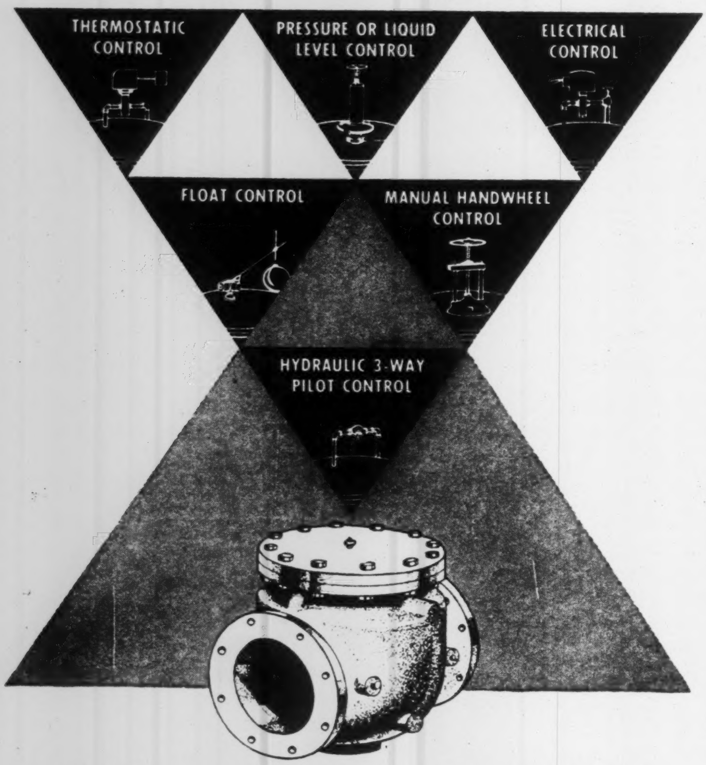

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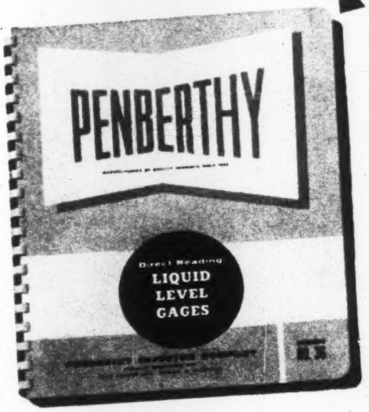

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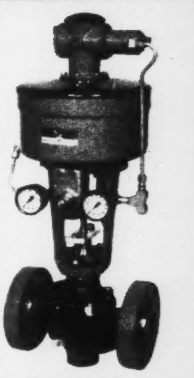

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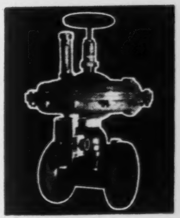

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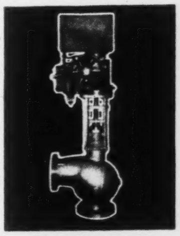

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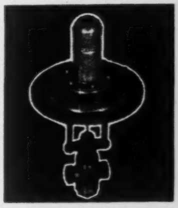

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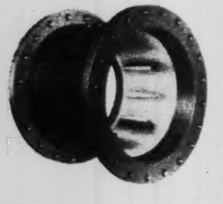

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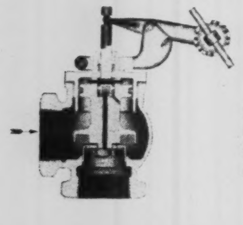

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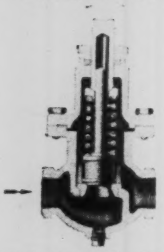

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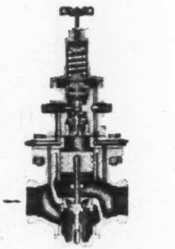

Foster Pressure Regulators provide the simplest automatic control of steam, liquid or gas pressures within required limits. They are available in a wide range of types and designs—direct acting for average regulation, or internal pilot-operated to provide practically instrument control; double-seated for continuous flow or single-seated for dead-end service.

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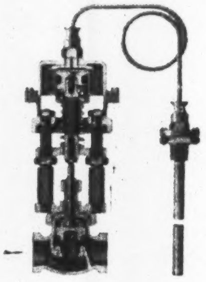
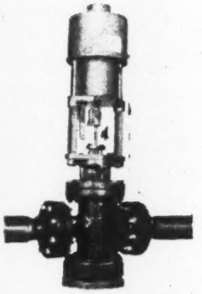


Foster Temperature Regulators are available in both pilot operated and direct acting types; single-seated to provide a tight shut-off preventing temperature creep during no-load periods, and double-seated for continuous flow. Direct acting or reverse acting, (for cooling).

CONTROL VALVES



The Foster Control Valve with Isoforce Actuator with Foster Bellofram construction gives you more power when you need it. No force is lost at the end of the stroke where spring compression requires the maximum force. This assures linearity of instrument and stem positions. It also gives you greater sensitivity because the travel is longer than in other diaphragm actuated types—allowing for increase in length of main valve for more sensitive throttling action.

Available in sizes starting at ½" with materials and end connections to suit operating conditions.

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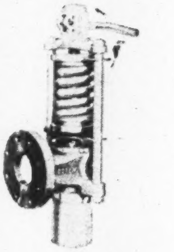

Foster 38-SV 'Super-Jet' Safety Valves stay tight, have high relief capacity, pop accurately, reseat with minimum blow down and are easy to service—they can be *completely* serviced and maintained, *in the line.*

For steam pressures up to 3000 Pounds.

For temperatures up to 1100°F.

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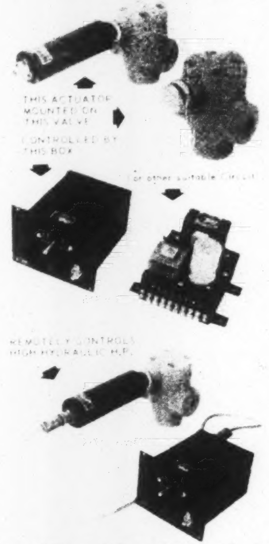
Custom Designed
HYDRAULIC VALVES
& VALVE ACTUATORS



Control & modulate 5000 psi hydraulic pressure with 15 watts electric power.

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Call: Baldwin 4-6582 or write

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HYDRAULICS, INC.**
110 TERREL CT. DAYTON 7, O.

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- HIGH PRESSURE
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- AN TUBE PORTS

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10,000 PSI
@ 150° F.
1/8 TO 1 INCH
GLOBE OR
ANGLE
AVAILABLE IN
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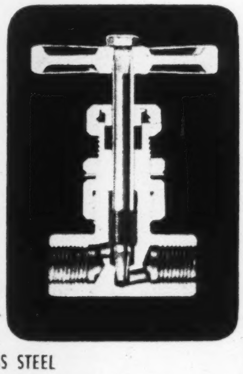
FORGED STEEL
AND STAINLESS STEEL



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Schutte & Koerting
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Taylor-Emmitt Controls
Trerice Co., H. O.
True-Flo Valve Div
Uniflow Valve Corp
United Hydraulics
Veeco Vacuum Corp
Velan Valve Corp
Waterman Engrg. Co
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Wheeler G. H. Mfg. Co

VALVES, Instrument Panel

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Hoke, Inc.
Marsh Corp., Jas. P.
Republic Mfg. Co

VALVES, Lubricated Plug

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Amer. Meter Co
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VALVES, Needle

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Autom. Switch Co
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Clark Cooper Co.
Conoflow Corp.
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Dragon Engrg. Co
Edward Valves, Inc
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Foxboro Co.
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Futurecraft Corp.
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Vickers, Inc.
Weatherhead Co.

VALVES, Non-Lubricated Plug

Automatic Switch
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Dahl Co., G. W
Defender Instr. & Reg.
DeZurik Shower Co
Hasco Valve & Machine
Kohler Co
Manning, Maxwell & Moore
Minneapolis-Honeywell
Mueller Co
Republic Mfg. Co
Wedgeplug Valve Co

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Annin Co
Assoc. Valve & Engrg
Atkomatic Valve Co
Atwood & Morrill
Autom. Switch Co
Barber-Colman Co
Bastian-Blessing
Black, Sivalls & Bryson
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Cooper Co., Clark
Dahl Co., G. W
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Foxboro Co.
Fulton Sylphon Div
Galland-Henning
General Controls
Greiner Co., Emil
Grinnell Co
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Hanna Engrg. Works
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Robertshaw-Fulton Conts
Sarco Co., Inc.
Skinner Elec. Valve Div
Spence **Engrg.** Co.
Squires Co., C.E.
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Valcor Engrg. Corp.
Veeco Vacuum Corp
Wabash Metal Prod
Waldorf Instr. Co
Wheelco Div.
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VALVES, Pressure Reducing and/or Back-Pressure, see Valves, Control

VALVES, Relief and Safety

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Aeronaut., Robertshaw-
  Fulton
Airmatic **Valve**
Amer. Instr. Co
Amer. **Meter Co**
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Foster **Engrg.** Co.
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Gar Prec. **Parts**, Inc.
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Hoke, Inc.
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**ROCKWELL
VALVES**
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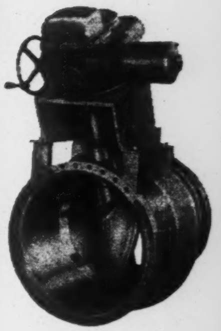
"Kwikleen" slide valve for powdered coal, granular materials, flue gases with high solids content, etc.; solids accumulations easily cleaned out by removing bottom plate.



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Butterfly valve with simplified bracket and linkage to air operator and valve disc positioner; provides maximum adjustment, minimizes friction, eliminates backlash, chatter and hunting, reduces power requirement in close control applications.

"Slim-Jim" wafer type butterfly valve for low pressure air, gas or liquids; low cost, light, simple, space-saving, easy to install.

What's your valve problem?

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2128 ELIOT STREET
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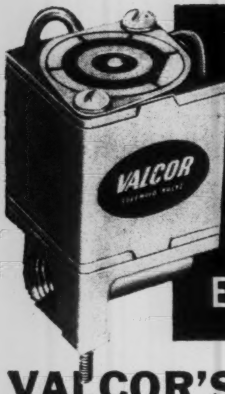

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VALCOR'S SV-4900
SERIES

- New, unique plunger seal design
- Soft, rubber seal assures bubble-tight sealing
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SOLENOID VALVES

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LEAKPROOF VALVES

- Hi Vacuum to 6000 PSI.
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Warren Engrg. Co.
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Westinghouse Air Brake Co

VALVES, Saunders Patent Type, see Valves, Diaphragm Seal

VALVES, Slurry, see Valves, Flexible Sleeve

VALVES, Solenoid-operated

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AiResearch Mfg. Co.
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Rivett Lathe & Grinder
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Westinghouse Air Brake Co
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VALVES, Solenoid-pilot controlled

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Allen Co., A. K
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Futurecraft Corp
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Kohler Co
Ledeen Mfg. Co.
Leslie Co.
Magnatrol Valve Corp
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Superdraulic Corp.
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Valcor Engrg. Corp.
Valvair Corp.
Versa Prods. Co
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VALVES, Toggle

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Greiner Co., Emil
Hoke, Inc.
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GE
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Blossom Mfg. Co
Lawter Chemicals
Maas & Waldstein
Sullivan Varnish Co.

VARNISHES, Insulating

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Bakelite Div.
Biggs Co., Carl H.
Blossom Mfg. Co.
Borden Co.
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Dolph, John C.
Dow Corning
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B-I-F Industries
Bailey Meter Co
Bristol Co
Foxboro Co
Infilco Inc.
Penn Insts. Div
Prec. Glass Prods. Co
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Canadian Rad. & Uran.
Chadux & Co
Disston & Sons, Inc.
Ferner Co.
Fish-Schurman
Gaertner Scientific Corp
Geier & Bluhm, Inc.
Gurley, W. & L. E.
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Stanley Tools
Starrett Co., L. S.
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Arnoux Corp.
Askania-Werke A. G.
Atlantic Research
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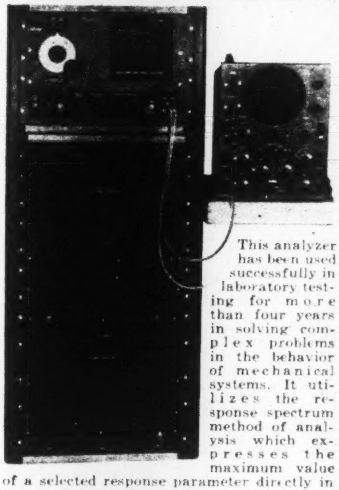
Donner Scientific
EPR Special Prods.
Eastern Prec. Resistor
Edin Co., Inc.
Electro-Mech. Res.

TRANSIENT RESPONSE
ANALYZER



This analyzer has been used successfully in laboratory testing for more than four years in solving complex problems in the behavior of mechanical systems. It utilizes the response spectrum method of analysis which expresses the maximum value of a selected response parameter directly in terms of a continuum of assumed values of natural frequencies and/or damping of the system. For example, a response parameter at the "known" natural frequency can be studied in comparison with the response at other values of natural frequency which might be achieved by changes in the system. An electric analog often has the advantage of saving time and effort in response analysis by eliminating the need for graphical or numerical solutions, especially when the number of values to be computed is large.

DYNAMIC MEASUREMENTS Corp.
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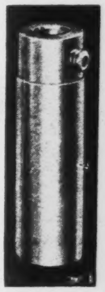
NORCROSS VISCOMETERS

for Automatically Measuring Viscosity in the process with the

PROVEN FALLING PISTON



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see Mountings, Shock and Vibration Absorbing

VIBRATION PICKUPS

Amer. Gyro Corp.
Amperite Co
Askania-Werke A. G.
Atlantic Research
Bendix Aviation, Pacific
Boekel & Co.
Bourns Labs.
Brush Instruments
Calidyne Co.
Carroll Co.
Chesapeake Inst. Corp.
Consol. Electrodynamics
Corbett Science Labs.
Crescent Engrg. & Res. Co
Crystal Research Labs.
Donner Scientific
Du Mont Lab., Allen B.
Edcliff Instruments
Electronic Engrg.
Electro Products Labs
Electro Voice
Endevco Corp
Engineering Res. & Dev
Epic, Inc.
Erwood, Inc
Fielden Instr. Div
GE Apparatus Sales
General Radio Co.
General Scientific Div
Genisco, Inc.
Georator Corp
Geotechnical Corp
Giannini, G. M.
Globe Phone Mfg
Haines Designed Prod
Hamilton Watch
Hathaway Instr. Co
Heiland Div.
Industrial Electronics
Internat. Res. & Dev Corp
Kistler Instr. Co
Lab-Tronics
M B Mfg. Co.
Massa Div. of Cohu
Minatron Corp
Neutronics Research
North American Instrs
Optron Corp
Optronic Co.
Phillips Petroleum
Schaevitz Engineering
Scientific Enterprises
Scott, Hermon Hosmer
Shure Brothers
Southwestern Ind. Elec
Sperry Gyroscope Co
Statham Instrs.
Telex, E. A. Div.
Tel-Instr. Electrs. Corp.
Texas Div., Brush
Vibra Shock Corp.
WacLine, Inc.
Westinghouse Electric
Wiancko Engrg. Co

VIBRATION TEST EQUIPMENT, including Shake Tables

All Amer. Tool & Mfg
Amthor Testing Inst. Co
Asch Equipment Co
Askania-Werke A. G.
Associated Research
Atlantic Research Corp
Baldwin-Lima-Hamilton
Biddle Co
Brush Instruments
Calidyne Co
Carroll Co
Chadwick Helmuth Co
Consol. Electrodynamics
Cox Instruments
Electro-Mec Lab.
Electro-Products Lab
Endevco Corp.
Engineering Res. & Dev
Erwood, Inc
Ferner Co.
Fielden Instrument
GE. Apparatus Sales
General Radio
Genisco Inc
Geotechnical Corp.
Hacker & Co.
Hathaway Instr. Co
Heiland Div.
Insco Co.
Internat. Res. & Dev. Corp
Kay Electric Co
Krouse Testing Machine
Lance Prod
L. A. B. Corp
Ling Electronics
Litton Ind. of Md
M. B. Mfg. Co
Massa Div. of Cohu
Martin-Hubbard Corp
New Brunswick Scient. Co
Parabam, Inc
RCA Div.
Rollin Co
Southw. Indust. Electronic
Statham Devel. Corp.
Sticht Co.
Technical Prods. Co.
Techno Inst. Co.
Tel-Instr. Electrs. Corp.
Temperature Engrg
Testing Machines, Inc
Walkirt Co.
Westinghouse Electric

VIBROGRAPHS

Askania-Werke A. G.
Baldwin-Lima-Hamilton
Cambridge Instr. Co.
Central Scientific Co.
Chicago Apparatus Co
Cox Instruments
Epic, Inc.
Geotechnical Corp.
Hamilton Watch
Heiland Div.
Impact Register Co.
International Res. & Dev
RCA Div.
Standard Science Supply
Vibration Specialty
Welch Mfg. Co., W. M.
Westinghouse Electric

VIBROMETERS

Advanced Electronics Inc.
Aircraft Electronics
Amer. Instr. Co
Askania-Werke A. G.
Associated Research
Chesapeake Instr.
Electrocon Corp.
Epic, Inc.
GE. Apparatus Sales
Geotechnical Corp.
Haines Designed Prod
Hamilton Watch
Hathaway Instr. Co.
Heiland Div.
International Res. & Dev.
Lab-Tronics
M.B. Mfg. Co
Martin-Hubbard Corp.
Massa Labs.
Scott, Inc. Hermon
Sticht Co.
Vibration Specialty
Walkirt Co
Western Radiation Lab
Westinghouse Electric

VIBROSCOPES

Aircraft Electronics
Airborne Instruments
Amperite Corp.
Brush Instruments
Bush Asso., G. F.
Carroll Co.
Chesapeake Instr.
Coleman Instr. Co
Cox Instruments
Daytronic Corp.
Electro Products Labs
Fisher Research Lab.
GE, Apparatus Sales
Hamilton Watch
Heiland Div.
Humboldt Mfg. Co
Insco Company
International Res. & Dev
Lab-Tronics
M.B. Mfg. Co.
Massa Labs.
Sprengnether Instr Co.
Varo Mfg. Co
Western Radiation Lab
Wood Counter Labs.

VICAT NEEDLES, see
Needles, Vicat

VISCOSIMETER BATHS, Constant-Temperature

Ace Glass
Amer. Instr. Co
American Research Corp.
Apex Scientific
Barnstead Still
Brabender Instrs.
Cannon Instr. Co.
Central Scientific Co
Chicago Surgical & Elec
Coleman Instr. Co.
Drage Products
Eitzen Co
Electric Hotpack Co.
Fish-Schurman Corp
Fisher Scientific Corp.
Gardner Lab
Greiner Co., Emil
Hallikainen Insts.
Humboldt Mfg. Co
Kahn & Co.
Koehler Instr. Co.
Labline, Inc.
LaPine & Co.
Modern Electrical Lab.
Modern Lab Equipt. Co.
Palo Lab. Supplies
Philadelphia Scientific
Powers Regulator Co.
Precision Scientific Co.
Process & Instruments
Refrigeration Systems
Research Specialties
Ruska Instruments
Sargent & Co., E. H.
Scientific Glass App.
Technical Equip. Co.
Tenney Eng.
Thwing-Albert
Wilkens-Anderson
Zeiss Inc., Carl

VISCOSIMETER (For Plastic Flow Fluids)

Ace Glass
Apex Scientific
Bendix Aviation Corp.
Brabender Instrs., C. W.
Brookfield Engrg. Labs.
Burrell Corp.
Cannon Instr.
Drage Products
Electro-Physics Co.
Ferranti Electric
Fischer & Porter Co
Fish-Schurman Corp
Gardner Lab.
GE. Apparatus Sales
Hagan Corp.
Indust. Test Equipt. Co.
Kontes Glass
Minneapolis-Honeywell,
  Boston Div.
Norcross Corp.
Precision Scientific Co.
Process & Instruments
Scientific Instr. Co.
Southwestern Ind. Elec.
Sunshine Scientific
Testing Machines, Inc.

VISCOSIMETERS, including Brookfield, Engler, Fenske, Ford (for Paint), Hoeppler, MacMichael, Ostwald, Redwood, Scott, Storme, Ubbelohde

Ace Glass
Aloe Co., A. S.
American Inst. Co.
Bendix Aviation Corp.
Berkeley Div.
Boekel & Co.
Brabender Instrs.
Bristol Co
Brookfield Engrg. Labs.
Cannon Instr. Co.
Central Scientific
Coleman Insts. Inc.
Eitzen Co., L. C.
Ferranti Electric
Fish-Schurman
Fisher Scientific
Foxboro Co.
Gaertner Scient. Corp
Gardner Lab.
Gerin Corp.
Greiner Co., Emil
Hagan Chem. & Controls
Hiergesell & Sons
Humboldt Mfg. Co.
Indust. Test Equipt. Co.
Industro-Scientific Co.
Instr. Devel. & Mfg. Corp
Kimble Glass
Koehler Instr. Co.
Kontes Glass
Labline, Inc.
National Instr. Co
Owens-Illinois Glass Co.
Phoenix Prec. Instr. Co.
Precision Scientific
Process & Instruments
Ruska Instr. Corp.
Sargent & Co., E. H.
Scientific Instr. Co
Scott Testers
Technical Equipt. Co
Testing Machines, Inc

VISCOSIMETERS, Kinematic

Ace Glass
American Instr. Co
Apex Scientific
Cannon Instr. Co.
Ferranti Electric
Fisher Scientific
Gardner Lab.
Greiner Co., Emil
Hallikainen Insts.
Hiergesell & Sons
Indust. Test Equipt Co
Koehler Instr. Co.
Kontes Glass
Labline, Inc.
Modern Lab. Equipt. Co
Nankervis Co.
Precision Scientific Co.
Scientific Development
Scientific Glass App.
Technical Equipt. Co.

VISCOSIMETERS, Recording

Bendix, Cincinnati Div.
Brabender Instrs.
Bristol Co.
Brookfield Engrg. Labs.
Coleman Insts. Inc.
Drage Products
Electro-Physics Co.
Fischer & Porter
Gaertner Scientific
Hallikainen Inst.
Hayes Scientific App.
Instrument Dev. Labs.
Indust. Test Equipt. Co
Minneapolis-Honeywell,
  Boston Div.
Norcross Corp.
Precision Scientific

VISCOSIMETERS, Saybolt

Ace Glass, Inc.
Amer. Instr. Co.
Boekel & Co.
Bristol Co.
Central Scientific
Corning Glass Works
Eltzen Co., Louis C.
Fisher Scientific
Greiner, Emil
Hallikainen Insts.
Hiergesell & Sons
Humboldt Mfg. Co
Kimble Glass
Koehler Instr. Co.
Kontes Glass
Labline, Inc.
Monarch Mfg. Wks.
Owens-Illinois Glass
Precision Scientific
Sargent & Co., E. H.
Scientific Glass App.
Zuhr, Inc., Henry

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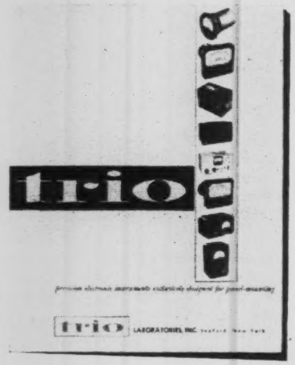
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VISCOSIMETERS, Ultrasonic

Bendix, Cincinnati Div
Gulton Mfg. Corp.
Hall Sonic Engrg. Co

VISCOSIMETERS, Zahn

Central Scientific
Electro-Tech Equip
Fisher Scientific.
GE, Apparatus Sales
Gardner Lab
Kontes Glass
Precision Scientific
Sargent & Co., E. H.

VISCOSITY CONTROLLERS

Askania Reg. Co.
Askania-Werke, A. G
Autom. Temp. Control
Bailey Meter Co.
Bendix, Cincinnati Div
Berkeley Div.
Brabender Instrs.
Bristol Co.
Brookfield Engrg. Labs
Drage Products
Fischer & Porter Co
Foxboro Co.
General Controls
GE
Hall-Sonic Engrg. Co
Hallikainen Inst.
Norcross Corp.
Perfex Corp.
R. K. L. Valve & Mfg. Co
Scientific Instr.
Taylor Instr. Cos.
Visco-Meter Corp.

VISCOSITY GAGES, see Viscosimeters

VISCOSITY TUBES

Ace Glass
Bellco Glass Co.
Berkeley Div.
Cannon Instr. Co.
Cargille, R. P.
Coleman Insts., Inc.
Eitzen Co., **Louis Co.**
Fisher Scientific
Fish-Schurman Corp.
Gardner Laboratory
Humboldt Mfg. Co.
Koehler Instr. Co.
Kontes Glass
Labline, Inc.
Owens-Illinois Glass
Phoenix Prec. Instr. Co
Precision Scientific
Pyramid Instrument
Scientific Glass App.

VOLTAGE COMPARATORS

ACF Electronics Div
Arma Corp.
Boonton Radio Corp.
Cal-Tronics Corp.
Consolidated Avionics
Daystrom Instr. Co
DoAll Co
Donner **Scientific**
Dynamics Research
Electro-Pulse, Inc.
Electro Insts., Inc.
Feller Engrg. Co.
Griswold Mfg. Co.
Hamner Electronics
Helipot Div.
Hycon Electronics
Kepco Labs.
Minneapolis-Honeywell
  Rubicon Instrs.
Non-Linear Systems
Optimized Devices
Phaostron Co.
Rainhart Co.
Rheem Mfg. Co
Scott, Inc., Hermon H
Sensitive Res. Instr.
Shallcross Mfg. **Co.**
Sheffield Corp.
Simpson Electric
Thordarson-Meissner
Wang Labs, Inc.
Wiancko Engrg. Co.

VOLTAGE DETECTORS, see Null Detectors

VOLTAGE DIVIDERS, see Attenuators, also Potentiometers (Resistors)

VOLTAGE, HIGH (above 2300 volts), MEASURING DEVICES and/or INDICATORS

Acton Labs.
Ad-Yu Electronics Labs.
Associated Research
Atomic Instr. Co.
Ballantine Labs
Barber Labs., Alfred
Beta Electric
Beone Instr.
Bradshaw Instruments
Cal-Tronics Corp.
Chicago Indus. Instr.
Dale Instruments
Davenport Mfg. Co.
Del Electronics Co.
Dittmore & Freimuth
Electronic Instr. Co
Federal Telephone
Feiler Engrg. Co.
Ferranti Electric
Freed Transformer
Fox Valley Inst
GE, Apparatus Sales
General Physical Lab
Hewlett-Packard Co.
Hickok Elect. Instr. Co
International Resistance
Jennings Radio Mfg. Co
Keithley Insts., Inc
Leeds & Northrup
Manson Labs.
Meters, Inc.
Minneapolis-Honeywell
  Rubicon Instrs.
Opad Electric
Peschel Electronics, Inc
Phaostron Co.
Philco Corp.
Precise Development
Precise Measurements Co
Precision Apparatus
Radio City Prod. Co
RCA Div.
Rawson Electcl. Instr
Reiner Electronics
Roller-Smith
Scient. Inst. Dev. Lab
Sensitive Res. Instr
Shallcross Mfg.
Sherron Metallic
Simpson Electric
Spellman Television
Sun Electric Corp.
Sylvania Elec. Prod
Triplett Electcl. Instr
Vectron, Inc.
Wallson Associates
Westinghouse Electric

VOLTAGE, HIGH (above 2300 volts), TESTING DEVICES

Advanced Electronics Inc
American Transformer
Asch Equipment Co.
Associated Research
Beta Electric
Bradshaw Instruments
Cal-Tronics Corp.
Chicago Indus. Instr
Davenport Mfg. Co.
Del Electronics
Detectolab, Inc.
Dittmore & Freimuth
Electronic Instr. Co.
Feller Engrg. Co.
GE, Apparatus Sales
Hewson Co.
Industrial Insts., Inc.
Industrial Test Equipt
International Resistance
Keithley Instruments
MacLeod & Hanopol
Magnatran Inc.
Manson Labs.
Minneapolis-Honeywell
  Rubicon Instrs.
Multi-Amp Corp.
Opad Electric
Peschel Electronics, Inc
Phaostron Co.
Precise Measurements Co
Precision Apparatus
Radio City Prod. Co
Radio Frequency Labs
Raytheon Mfg. Co.
Reiner Electronics
Roller-Smith
Scient. Inst. Dev. Lab
Sensitive Res. Instr
Shallcross Mfg. Co.
Sherron Metallic
Simpson Electric
Slaughter Co.
Spellman Television
States Co
Superior Electric
Thordarson-Meissner
Transistor Devices
Triplett Elect. Instr.
Westinghouse Electric
Weston Instrs.

VOLTAGE REGULATORS, Glow Tube

Anton Electronic Labs.
Chatham Electronics Div
GE, Tube Dept.
Industro Transistor Corp.
Kepco Labs.
Mercury Electronic Co
Nuclear Devel. Lab.
Power Supplies
Radio Corp. of Amer.
Raytheon Tube Div.
Rheem Mfg. Co.
Servo-Tek Prods. Co
Transval Engrg. Corp
Victoreen Instr. Co.
Western Gear Corp.

VOLTAGE REGULATORS, Line Voltage (see also Transformers, Constant Voltage)

ACF Electronics
Acme Electric Corp
Allis-Chalmers
Ameri. Machine & Fdry
Amer. Transformer
Amperite Corp.
Amplifier Co.
Anton Electronic Labs.
Askania Reg. Co.
Assembly Products
Authorized Mfrs. Service
Automatic Electric
Barber-Colman
Beck Co.
Bendix, Eclipse Pioneer
Bendix, Red Bank
Beva Laboratory
Bogue Elect. Mfg. Co
Boonton Radio Corp
Bradley Labs.
Burroughs Corp.
Cal-Tronics Corp
Chicago Std. Transf. Corp.
Clark Controller
Clarostat Mfg. Co
Clippard Instr. Lab
Collins Radio
Communication Meas. Lab
Control Corp.
Cox Instruments
Curtiss-Wright Corp
Cutler-Hammer
Devtronics, Inc
Dressen Barnes Corp
Electra Mfg. Co
Electric Hotpack Co
Electric Regulator Corp
Electrical & Physical Instr
Electronic Associates
Electronic Measmt. Co.
Electronic Res. Assoc
Electronic Specialty Co
Electrosig Corp.
Electro Tech Equip.
El-Tronics, Inc.
Federal Telephone
Ferris Instr. Corp
Fielden Instr. Div
Fredericks, George
Furst Electronic
G-V Controls, Inc.
GE, Apparatus Sales
Gates Radio Co.
General Megnetics Inc
General Radio
Hanson-Gorrill-Brian
Hastings-Raydist
Helipot Div.
Hevi-Duty Electric
Instruments Inc.
International Resistance
Jersey City Tech. Lab
Jo-Line Tools
Kay-Lab
Kellogg Switchboard
Kemlite Labs.
Kepco Labs.
Laboratory for Electronics
La Marche Mfg.
Lambda Electronics
Lewis & Co., J. B.
Magnetic Amplifiers, Inc
Magnetic Instr. Co
Magnetic Research Corp.
Maxson Corp., W. L.
Mercury Electronic Co
Metrotype Corp.
Minneapolis-Honeywell,
  Boston Div.
NJE Corp.
Newark Electric Co
North Amer. Phillips Co
Nuclear Chicago
Oregon Electronic
Peschel Electronics
Perkin **Engrg. Co**
Polarad Electronics
Power Supplies
Precise Measmts. Co
Process & Instruments
Radiation Instr. Dev. Lab
RCA Div.
Radio City Products
Raytheon **Mfg.** Co.
Reeves Instr. Corp.
Research Specialties
Richardson-Allen
Rockwell Engr.
Rudolph & Sons, O. C
Shallcross Mfg. Co.
Sherron Metallic
Sola Electric
Sorensen & Co.
Standard Elect. Time Co
Streeter-Amet Co.
Superior Electric
Sylvania Elect. Prods.
TAB
Teletronics Lab.
Tel-Instr. Electrs. Corp
Thermador Electcl. Mfg. Co
Thordarson-Meissner
Timely Insts. & Conts. Co
Transistor Devices
Transmag Div.
Transval Engrg. Corp.
United Electric
United Transformer Corp
Varian Assocs.
Varo Mfg. Co
Vickers Elec. Div.
Victoreen Inst. Co
WacLine, Inc.
Wallson Associates
Walkirt Co.
Ward Leonard
Westinghouse Electric
Wilson & Co., G. C.
Yellow Spring Instr. Co

VOLTAGE STANDARDS, see Standard Cells

VOLTAGE SUPPLIES, see Power Supplies

VOLT-AMMETERS

Amer. Elect. **Sales Co**
Amer. Mach. & Foundry
Assembly Products
Associated **Research, Inc**
Beckman Instruments
Beede Electcl. Instr. Co
Bradshaw Instruments
Bristol Co.
Burton-**Rogers**
Chicago Indust. Instr. Co
Clough-Brengle Co.
Columbia Electric Mfg.
Computer Co. of Amer.
Dale Instruments
Davenport **Mfg. Co.**
De Jur-**Amsco Corp.**
Dittmore Freimuth Corp
Electro-Mechanical Insts.
Electro-Tech Equipt. Co.
Electronic Dev. Lab
Electronic Instr. Co
Engelhard, Inc., Charles
Epic, Inc
Esterline-Angus Co.
Feller Engrg. Co.
Fox Valley Inst.
GE, Apparatus Sales
Greibach Instruments
Gulton Industries
Hickok Electcl. Instr. Co
International Instrument
Instrument Labs
Kin Tel
Lewis Engrg. Co.
Marion Elec. Inst.
Martindale Elect. Co.
Mastercraft Inst. Co.
Measurements Corp
Meters, Inc.
Mil Instr. Corp
Miller, M. C.
Newark Electric Co
Phaostron Co.
Physics Research
Precision Apparatus Co
Pyramid Instr. Corp.
Q. V. S., Inc.
Radio City Products
RCA Div.
Rawson Electcl. Instr
Reiner Electronics
Rochester Mfg. Co
Roller-Smith Co.
Sangamo Electric
Schauer Mfg. Corp
Sendur Inc.
Sensitive Res. Instr
Shurite Meters
Simpson Electric
Sticht Co.
Sun Electric
Supreme Instruments
Triplett Elect. Instr. **Co**
United Electric
United Optical **Mfg.**
U. S. Gauge Div.
Waters Mfg.
Welch Mfg. Co., W. M
Westberg Mfg. Co
Westinghouse Electric
Weston Instrs
Wheelco Instr. Co

VOLT-AMPERE-HOUR METERS

Ferranti Electric
GE Apparatus Sales
Minneapolis-Honeywell
Roller-Smith
Sangamo Electric
Simpson Electric
Waters Mfg
Westinghouse Electric

VOLT-AMPERE METERS, Reactive

Amer. Mach. & Foundry
Bristol Co.
Dittmore & **Freimuth**
Electrical **Facilities**, Inc
Esterline-Angus Co
GE, Apparatus Sales
Hickok Electr. Instr
Landis & Gyr, Inc.
Roller-Smith
Sangamo Electric
Sensitive Research Inst
Simpson Electric
Triplett **Electr.** Instr.
Waters **Mfg**
Welch Mfg. Co., W. M
Westinghouse Electric
Weston Instrs.

VOLTMETERS, AC, Rectifier

Amer. Mach. & Foundry
Assembly Prod., Inc
Associated Research
Ballantine Labs.
Beede Electcl. Instr. Co
Boonton Radio Corp
Bradshaw Instruments
Bristol Co.
Burton Rogers
Chicago Indust. Instr. Co
Dale Instr. Co.
Davenport Mfg. Co.
De Jur-Amsco Corp.
Dittmore & Freimuth
Elec. Design & Mfg.
Electro-Mech. Instr.
Electr-Tech Equip.
Electronic Eng'ng. Service
Electro Insts.
Electronic Instr. Co.
Endevco Corp.
Esterline-Angus
Feller Engrg. **Co**
Fisher **Res. Lab.**
Gar Electcl. Instr.
GE Apparatus Sales
General Radio Co
Helipot Div.
Hewlett-Packard
Hickok Electcl. Instr
International Instruments
Mag Electric
Marion Elec. Instr. Co
Mastercraft Inst. Co.
Meters, Inc.
Mil Instr. Corp.
Norton Elect. Instr. Co
Pace Electrical Inst.
Phaostron Co.
Physics Research
Precision Apparatus Co.
Q. V. S., Inc.
RCA Div.
Radio City Products
Roller-Smith
Sendur Inc.
Sensitive Res. Instr
Shallcross Mfg.
Simpson Electric
Sterling Mfg. Co.
Sun Electric

Supreme, Inc
Sylvania Elect. Prods
Texas Insts., Inc
Tipp-Tronic, Inc.
Triplett Elect. Instr. Co
United Optical Mfg.
U. S. Gauge Div.
WacLine, Inc
Waters Mfg
Welch Mfg. Co., W. M
Westinghouse Electric
Weston Instrs
Western Electro Acoustic

VOLTMETERS, Contact Making, see D'Arsonval type Controllers

VOLTMETERS, Digital

Berkeley Div.
Cal-Ohm Labs
Chatham Electronics Div
Coleman Engrg. Co
Computer Corp. of Amer
Consolidated Avionics
Datran Electronics
Dymec, Inc
Electro Insts.
Electronic Assocs
Franklin Electronics
Furst Electronics
Hanson-Gorrill-Brian
Hycon Electronics
Julie Res. Labs
Lab. for Electronics
Leeds & Northrup
Link Aviation
Moseley Co.
Non-Linear Systems
Phaostron Co
Reeves Instr. Corp
Simpson Electric Co
Systron Corp.
Telecomputing Corp.
Wang Labs., Inc
Weston Instrs

VOLTMETERS, Electrostatic

Assembly Products
Cambridge Instr. Co
Custom Scient. Insts
Dittmore & Freimuth
Electro-Tech Equip
Epic, Inc
Ferranti Electric
GE
General Electronic
Hathaway Instr. Co
Hickok Elect. Instr. Co
Hycon Electronics
Industrial Control
Keithley Instruments
Landsverk Electrometer
Rawson Electcl. Instr
Scientific Specialties
Sensitive Res. Instr
Simpson Electric
Sticht Co., Herman H.
United Optical Mfg
WacLine, Inc
Weston Instrs

VOLTMETERS, Indicating

Assembly Prod., Inc
Associated Research
Ballantine Labs.
Barber Colman
Beede Electcl. Instr. Co
Berkeley Div.
Boone Instr.
Bristol Co.
Brush Instruments
Burton-Rogers
Cal-Tronics Corp.
Chicago Indust. Instr
Clough-Brengle Co
Columbia Elect. Mfg
Control Corp.
Dale Instruments
De Jur-Amsco Corp
Dittmore & Freimuth
DuMont Labs., Allen B.
Elec. Design & Mfg
Electro Insts., Inc.
Electro-Mechanical Inst.
Electronic Development
Electronic Measmts. Co.
Endevco Corp.
Epic, Inc.
Fed. Telephone & Radio
Feiler Engrg. Co.
Ferranti Electric
Fielden Instr. Div.
GE, Apparatus Sales
Helipot Div.
Hickok Electcl. Instr. Co
Hycon Electronics
Industrial Control Co.
International Instruments
J-B-T Insts.
Kay Electric
Keithley Instruments
Lewis Engrg. Co.
Link Aviation
Mag Electric
Marion Elec. Instr. Co
Mastercraft Inst. Co.
Measurements Corp.
Meters, Inc.
Mil Instr. Corp.
Miller, M. C.
Minneapolis-Honeywell,
  Boston Div.
Niagara Electrical Instr.
North Atlantic Industs.
Norton Electcl. Instr.
Pace Electcl. Instr
Phaostron Co
Physics Research
Precision Apparatus Co
Q.V.S., Inc.
Radio City Prod. Co
Railway Communications
Rawson Electcl. Instr
RCA Tube Div.
Reiner Instr. Co
Roller-Smith
Scott Inc., Herman Hosmer
Sensitive Res. Instr
Shelby Inst.
Shurite Meters
Sierra Electronic
Simpson Electric
Southw. Indust. Electronic
Sterling Mfg. Co.
Sticht Co., Herman H.
Sun Electric
Supreme, Inc
Texas Insts., Inc
Tipp-Tronic, Inc
Triplett Indust. Electronic
Triumph Mfg. Co.
United Electric
United Optical Mfg
U. S. Gauge Div
Voltron Products
WacLine, Inc.
Waters Mfg
Welch Mfg. Co., W. M
Westinghouse Electric
Weston Instrs.
Wheelco Div.
Winslow Co.

VOLTMETERS, Laboratory Standard

Advance Electronics
Ballantine Labs.
Beckman Instruments
Boonton Radio Corp
Bruno-N. Y. Indus.
Burton-Rogers
Cal-Ohm Labs
Carroll Co.
Central Scientific
Computer Co. of Amer
Davenport Mfg. Co.
Dittmore & Freimuth
Electro Insts., Inc.
Electronic Instr. Co
Electro-Tech Equip.
Engelhard Inc., Charles
Feiler Engrg. Co.
Ferranti Electric
Fluke Mfg. Co., John
Furst Electronics, Inc
GE, Apparatus Sales
Greibach Instruments
Gulton Industries
Hickok Electcl. Instr. Co
Industrial Control Co.
Marion Electcl. Instr. Co
Measurements Corp.
Minneapolis-Honeywell,
  Boston Div.
Non-Linear Systems
Oltronix Co.
Phaostron Co
Physics Research
RCA
Radio Frequency Labs
Rawson Electcl. Instr
Roller-Smith
Sensitive Res. Instr
Simpson Electric
Southw. Indust. Electronic
Triplett Electcl. Instr
United Optical Mfg.
U. S. Gauge Div.
Welch Mfg. Co., W. M
Westinghouse Elect. Corp
Weston Instrs.

VOLTMETERS, Micro, RF

Ballantine Labs.
Beede Electcl. Instr.
Blonder-Tongue Labs
Boonton Radio Corp.
Clarke Instr. Corp.
Computer Co. of Amer
Elect. Des. & Mfg. Co
Empire Devices
Federal Telephone
Feiler Engrg. Corp
Ferris Instr. Corp.
GE
General Radio
Hewlett-Packard
Hickok Electcl. Instr. Co
Kay Electric
Leeds & Northrup
Millivac Instruments
Phaostron Co.
Shasta Div.
Sierra Electronic Corp.
Simpson Electric
Stoddart Aircraft Radi
Sylvania Elect. Prods
Triplett Elect. Inst.
WacLine, Inc.
Welch Mfg. Co., W. M.
Weinschel Engrg. Co.
Westinghouse Electric

VOLTMETERS, Millivolts and Microvolts

Ad-Yu Electronics Labs.
Alto Scientific Co.
Amer. Tradair Corp.
Asch Equipment Co.
Assembly Products
Associated Research
Ballantine Labs.
Barber-Colman
Beckman Instruments
Beckman & Whitley
Beede Electcl. Instr. Co
Biddle Co., James G.
Boonton Electronics
Boonton Radio Corp.
Bristol Co.
Brunswick Instruments
Brush Instruments
Burton-Rogers Co
Cambridge Instr. Co.
Chicago Ind. Instr.
Columbus Products
Communication Meas. Lab
Computer Co. of Amer.
Cox Instruments
Dale Instruments
Daven Co.
DeJur-Amsco Corp
Dittmore & Freimuth
DuMont Lab., Allen B
Elect. Design & Mfg.
Electro Insts
Electro-Mech. Instr. Co
Electronic Devel. Co
Engelhard, Chas.
Epic, Inc
Esterline-Angus
Federal Telephone & Radio
Feller Engrg. Co.
Fielden Instr. Div
Fisher Research Lab
Foxboro Co.
Franklin Electronics
Freed Transformer
Gar Electcl. Instr
GE, Apparatus Sales
General Radio
Greibach Instruments
Gulton Industries
Heath Co.
Hickok Electcl. Inst. Co
Hycon Electronics
Industrial Control Co
Internat. Instruments
J-B-T Insts.
Jarco Services
Kay Electric
Keithley Insts
Kin Tel
Lewis Engrg. Co
Liston-Becker
Mag Electric
Manning, Maxwell & Moore
Marconi Instruments
Marion Electcl. Instr
Mastercraft Inst. Co.
Measurements Corp
Meters, Inc
Microvolts, Inc
Mil Instr. Corp
Miller, M. C.
Millivac Instruments
Minneapolis-Honeywell
  Boston Div.
Moseley Co., F. L.
Non-Linear Systems
Norton Electcl. Instr
Pace Electcl. Instr
Phaostron Co.
Physics Research
Pimex, Inc.
Precision Apparatus Co
Pyrometer Instr. Co
Q.V.S., Inc.
RCA
Radio City Products
Rawson Electcl. Instr
Reiner Electronics
Roller-Smith
Scientific Specialties
Sensitive Res. Instr
Shallcross Mfg. Co
Sierra Electronic
Simpson Electric
Southw. Indust. Electronic
Standard Science Sup
Sun Electric
Sun Mfg. Co
Supreme, Inc
Teletronics Labs., Inc
Televiso Co
Texas Insts., Inc
Thwing-Albert
Trio Labs., Inc.
Triplett Electcl. Instr
United Electric
United Optical Mfg.
WacLine, Inc.
Waters Mfg.
Welch Mfg. Co., W. M.
West Instr.
Westinghouse Electric
Weston Instrs.
Western Electro-Acoustic
Wheelco Div

VOLTMETERS, Millivoltmeters, AC, Rectifier

Assembly Products
Ballantine Labs.
Beckman Instruments
Beede Electcl. Instr.
Boonton Radio Corp.
Bristol Co.
Burton-Rogers
Chicago Indust. Instr
Dale Instruments
DeJur-Amsco
Dittmore & Freimuth
DuMont Lab., Allen B.
Elect. Design & Mfg
Electro Insts., Inc.
Electronic Development
Electronic Instr. Co.
Electro-Tech Equip.
Fed. Telephone & Radio
Feiler Engrg. Co.
Fisher Res. Lab.
GE, Apparatus Sales
Gar Electcl. Instr. Co
Hewlett-Packard
Hickok Elec. Instr.
Internat. Instruments
Mag Electric
Marion Electcl. Instr
Mastercraft Inst. Co.
Mil Instr. Corp.
Pace Electcl. Instr
Phaostron Co.
Physics Research
Precision Apparatus Co
Q.V.S., Inc.
Radio City Products
Roller-Smith
Sensitive Res. Instr.
Simpson Electric
Southw. Indust. Electronic
Special Instruments Lab
Sun Electric
Supreme, Inc.
Texas Insts., Inc
Tipp-Tronic, Inc.
Triplett Electcl. Instr. Co
United Optical Mfg.
WacLine, Inc.
Waters Mfg.
Welch Mfg. Co., W. M
Westinghouse Electric
Weston Instrs.

VOLTMETERS, Oxide Rectifier

Beede Electcl. Instr.
Chicago Indust. Instr.
Clough-Brengle
Dale Instruments
DeJur-Amsco Corp
Elect. Design & Mfg
Electronic Dev. Lab
Electro-Tech Equip
Esterline-Angus
Feiler Engrg. Co
GE, Apparatus Sales
General Radio
Hickok Electcl. Instr
Marion Electcl. Instr
Meters, Inc.
Pace Electcl. Instr
Phaostron Co
Physics Research
Precision Apparatus Co
Reiner Electronics
Roller-Smith
Simpson Electric
Sun Mfg. Co.
Supreme Inc.
Texas Instrs., Inc
Tipp-Tronic, Inc.
Triplett Electcl. Instr
Triumph Mfg. Co.
United Electric
WacLine, Inc
Westinghouse Electric

VOLTMETERS, Peak

Ballantine Labs
Barber Labs., Alfred
Beta Electric
Burton-Rogers
Clark Instr. Corp
Clough-Brengle
Control Devices
Davenport Mfg. Co
Electronic Dev. Lab
Electronic Measurements
Ellis Associates
Endevco Corp.
Federal Telephone
Feiler Engrg. Co.
Fox Valley Instr. Co
Franklin Electronics
GE, Apparatus Sales
General Radio
Gertsch Products
Hewlett-Packard
Hickok Electcl. Instr.
Industrial Devices Inc
Jennings Radio Mfg. Co
Kay Electric
Measurements Corp
Non-Linear Systems
Physics Research
Radio City Products
RCA
Rawson Electcl. Instr
Rowe Engrg. Co.
Sensitive Res. Instr
Shepard Labs
Simpson Electric
Supreme, Inc.
Triplett Electcl. Instr.
WacLine, Inc.

VOLTMETERS, Recording

Alfax Paper & Engrg.
Amer. Mach. & Foundry
Audio Instr. Co.
Barber-Colman
Berkeley Div.
Bristol Co.
Brush Instruments
Cambridge Instr. Co.
Consolidated Avionics
Electrical Dev. Co.
Electro Insts., Inc.
Electro-Tech Equip
Endevco Corp.
Engelhard, Chas
Engrg. Enterprises
Esterline-Angus
Franklin Electronics
Fielden Instr. Div.
GE, Apparatus Sales
Hycon Electronics
Larson Instr. Div.
Leeds & Northrup
Manning, Maxwell & Moore
Massa Labs.
Millivac Instr. Co
Non-Linear Systems
Oltronix Co.
Physics Research
Precise Measurements Co
Roller-Smith
Sanborn Co.
Sangamo Electric
Techn. Prods. Co.
Texas Insts., Inc.
Westinghouse Electric
Weston Instrs.

VOLTMETERS, Thermionic Rectifier

Ballantine Labs
Barber Labs., Alfred
Beede Elect. Instr.
Cambridge Instr. Co.
Chicago Indust. Instr.
Clippard Instr. Lab.
Electronic Dev. Lab.
Fluke Mfg. Co., John
GE, Apparatus Sales
General Radio Co.
Hickok Elec. Instr.
Measurements Corp
Meters, Inc.
Physics Research
Simpson Electric
Sylvania Elect. Prods
Triplett Elect. Instr.

VOLTMETERS, Thermo

Amer. Elect. Sales Co.
Assembly Products
Beede Elect. Instr. Co.
Cambridge Instr. Co.
Dale Instruments
De Jur-Amsco
Electronic Development
Flow Corp
GE, Apparatus Sales
Greibach Instruments
Hickok Elec. Instr.
Lewis Engrg. Co.
Meters, Inc.
Physics Research
Pimex, Inc.
Pyrometer Instr. Co
Radio City Products
Rawson Electcl. Instr.
Sangamo Electric
Sensitive Res. Instr.
Sun Manufacturing
Triplett Electcl. Instr.
WacLine, Inc
Welch Mfg. Co., W. M.
Westinghouse Electric
Weston Instrs.
Wheelco Instr. Div

VOLTMETERS, Vacuum Tube, see Vacuum Tube Voltmeters

VOLT-OHMMETERS

Associated Research
Beckman Instruments
Beede Electcl. Instr.
Beta Electric
Bradshaw Instruments
Bruno-N. Y. Indus.
Cal-Ohm Labs
Chicago Indust. Instr
Clippard Instr. Lab.
Clough-Brengle
Co-Design Corp
Dale Instruments
Daven Co.
DeJur-Amsco
Delmhorst Instr. Co.
Douglas Radio Labs.
Electro Instruments
Electro-Mech. Instr.
Electro Products
Electro Tec. Equipt. Co
Electronic Dev. Lab
Electronic Engrg. Serv.
Electronic Instr. Co
Electronic Measurements
Feiler Engrg. Co
Franklin Electronics
Freed Transformer
GE
General Radio
Greibach Instruments
Gulton Industries
Hickok Electcl. Instr.
Hycon Electronics
Industrial Control Co
Industrial Instruments Inc
Instrument Labs
Internat. Instruments Inc
Jackson Electcl. Instr
Keithley Instruments
Marconi Instruments
Martindale Electric
Meters, Inc.
Mil Instruments Corp.
Millivac, Inst
New London Instr. Co.
Newark Electric Co.
Non-Linear Systems
Northeastern Engrg. Inc
Phaostron Co
Philco Corp.
Physics Research
Pimex, Inc.
Precise Measurements
Precision Apparatus Co.
Q.V.S., Inc.
Radio City Products
RCA, Tube Div.
Rawson Electcl. Instr
Reiner Electronics Co
Roller-Smith
Sensitive Res. Co.
Shallcross Mfg. Co
Sherron Metallic
Shurite Meters
Simpson Electric
Southw. Indust. Elect
Sticht Co., Herman H.
Sun Electric Corp.
Sun Mfg. Co.
Superior Instruments
Supreme, Inc.
Teletronics Labs., Inc.
Triplett Electcl. Instr.
Triumph Mfg. Co.
United Optical Mfg.
Universal Instr. Co.
Waters Mfg.
Welch Mfg. Co., W. M.
Western Radiation Labs
Westinghouse Electric
Weston Instrs.

VOLT-OHM-MILLIAMMETERS

Acton Labs.
Air-O-Tronics
Allied Radio Corp.
Beede Electcl. Instr
Bradshaw Instruments
Bristol Co.
Bruno-N. Y. Indus.
Cal-Ohm Labs.
Carol Electronics
Chicago Indust. Instr.
Cole Instr. Co
Columbus Products
Computer Co. of Amer.
Dale Instruments
Douglas Radio Labs.
Electro-Mech. Instr.
Electronic Development
Electronic Engrg. Co.
Electronic Instr. Co
Electronic Measmts. Corp.
Electro-Tech Equip
Federal Telephone
Feiler Engrg. Co.
Greibach Instruments
Gulton Industries
Hewlett-Packard
Hickok Electcl. Instr.
Instrument Laboratories
Jackson Elect. Instr.
Mag Electric
Marion Electcl. Instr
Martindale Electric
Meters, Inc
Mil Instr. Corp
Millivac Instruments
Newark Electric Co
Non-Linear Systems
Phaostron Co.
Philco Corp.
Physics Research
Pimex, Inc.
Precise Development
Precision Apparatus Co
Precision Electronics
Pyramid Instrument
Q.V.S., Inc
Radio City Products
RCA, Tube Div.
Reiner Electronics Co
Roller-Smith
Simpson Electric
Sticht Co., Herman
Supreme, Inc.
Sylvania Elect. Prods
Technology Instr. Co
Teletronics Labs., Inc
Triplett Electcl. Instr
United Optical Mfg
Waters Mfg
Westinghouse Electric
Weston Instrs
Yonkers Industries

VOLUME CONTROLS, see Potentiometers (Resistors)

VOLUME INDICATORS, Sound, see Sound

VOLUME STANDARDS, see Standards, Volume

VSWR INDICATORS

Allied Radio Corp
BJ Electronics
Calif. Tech. Indus
Cubic Corp
Edison, Thomas A
Electronic Tube Corp.
F-R Machine
General Radio Co
Gulton Industries
Hewlett-Packard
Industrial Control Co
Johnson Co., E. F.
Marconi Instruments
Narda Microwave Corp
Northeast Electronics
Polarad Electronics
Polytechnic Res. & Dev. Co
Sierra Electronic Corp
Sylvania Elec. Prods

WASHERS, Amber

Felt Products Mfg
Polymer Corp. of Pa
Waltham Screw Co

WASHERS, Lead

Alpha Metals, Inc.
Auburn Mfg. Co
Autoscrew Co.
Bar-Ray Products
Belmont Smg. & Refg
Division Lead Co.
Federal Screw Prod. Co
Federated Metals
Felt Products
Heitz, Inc., Karl
Hi-Grade Alloy Corp
Koehler Instr. Co.
Stafford Co.
Star Stainless Screw Co
Staver Co., Inc.
Stimpson Co., Edwin B
Stronghold Screw Prods
United Screw & Bolt
Whitehead Stamping

WASHERS, Precious Metal

Alpha Metals, Inc.
Amer. Platinum Wks
Amer. Silver Co.
Auburn Mfg. Co.
Autoscrew Co.
Baker & Co., Inc
Bishop Platinum Wks
Federal Screw Prods. Co
General Plate Div.
Gibson Electric
Handy & Harman
Heitz, Karl, Inc.
Keystone Carbon Co
Modern Tech. Supply
Ney Co.
Research Devel. Mfg
Secon Metal Corp.
Staver Co., Inc.
Stimpson Co.
Swissomatic Products
Waltham Screw Co
Whitehead Stamping
Wilson Co., H. A.

WASTE TREATMENT INSTRUMENTS

Amer. Meter Co.
B-I-F Industries
Bailey Meter Co.
Beckman Insts. Div.
Bristol Co.
Builders-Providence
B/W Controller Corp
Fischer & Porter Co.
Foxboro Co.
Greiner Co., Emil
Harshaw Scientific Div.
Hays Corp
Industrial Instrs.
Leeds & Northrup

Leupold & Stevens
Mason-Neilan Div.
Minneapolis-Honeywell Indust. Div.
Penn. Insts. Div.
Phoenix Precision Inst.
Precision Scientific
R. K. L. Valve Mfg. Co
Simplex Valve & Meter
Taller & Cooper
Wallace & Tiernan

WATCH RATE TESTERS

American Time Prods.
Borel & Co.
G. M. Mfg. Co.
Gordon Enterprises
Paulson & Co.
Potter Instr. Co
Wakmann Watch Co

WATCHES, Chronometer, including Marine (see also Clocks)

Allied Prods. Div.
Bliss & Co.
Borel & Co.
Clebar Watch Co
Ducommun Co., M.
Elgin National Watch
Hamilton Watch Co.
Jaeger Watch Co.
Jardur Import Co.
Lafayette Instr. Co
Negus, T. S. & J. D
Sticht Co.
Technical Instruments
Wakmann Watch Co

WATCHES, Stop

Allied Prods. Div.
Aristo Import Co.
Biddle Co., James G.
Central Scientific
Clebar Watch Co.
Dietzgen Co., Eugene
Ducommun Co., M.
Eitzen Co., Louis C.
Elec. Facilities, Inc.
Electro-Tech Equip.
Elgin National Watch
Fish-Schurman
Fisher Scientific
Gaertner Scientific
Gallien, R. P.
General Scientific Equipt
Gordon Enterprises
Greiner, Emil
Hamilton Watch Co.
Jaeger Watch Co.
Jardur Import Co.
Lafayette Instr. Co.
Martindale Elect. Co.
Negus, T. S. & J. D
Precision Scientific
Racine & Co., Jules
Scherr Co., Inc.
Speidel & Co.
Standard Elec. Time
Sticht Co., Herman H.
Stoelting Co., C. H.
Wakmann Watch Co.
Weston Instrs.
White Co.
Zernickow Co.

WATCHES, Stop-Electric

Central Scientific Co.
Chrono-Log
Clebar Watch Co.
Cramer Controls Co.
Dimco-Gray
Elgin Natl. Watch Co
Greiner, Emil
Jaeger Watch Co.
Jardur Import
Lafayette Instr. Co.
Precision Scientific Co.
Standard Elect. Time
Sticht Co.
Stoelting Co., C. H.
Thompson Clock Co.
Wakmann Watch Co.
Weston Instrs.

WATCHMAKER'S SUPPLIES

Amer. Laubscher
Bausch & Lomb
Bayside Watch Tool
Borel & Co., Jules
Gallien, R. P.
Hairspring Vibrating
Jadow, Inc.
Kastner, Charles
L & R Mfg. Co.
Levin & Son, Louis
Marshall Co., C. & E.
Modern Tech. Supply
Newall Mfg. Co.
New Jersey Jewelers' Sup
Nye, Inc., William F.
Sickles & Sons, Inc., M.
Swissomatic Products
Wakmann Watch Co.
Waples, Wm. S.
Zenith Mfg. & Chem. Corp

WATCHMAKER'S TOOLS (see also Jewelers' Lathes)

Bayside Watch Tool
Borel & Co., Jules
Derbyshire, Inc., F. W.
Dixon, Inc., William
Fineisen, A. R.
Gallien, R. P.
Gilman Engrg. & Mfg
Grobet File Co. of Amer.
Gustafson Mfg. Co.
Hirschmann Co., Carl
Ideal-Aerosmith
J & S Tool Co.
Jadow, Inc.
Jensen Mfg. Co.
Kastner, Charles
Kendrick & Davis Co.
L & R Mfg. Co.
Levin & Sons, Louis
Lorber Export, Import
Marshall Co., C. & E.
Modern Tech. Supply
Morris Co., J. I.
Newall Mfg. Co.
New Jersey Jewelers' Sup
Rivett Lathe & Grinder
Sandvik Saw & Tool
Sickles Sons, Inc., M.
Wakmann Watch Co.
Waples, W. S.
Zenith Mfg. & Chem. Corp

WATER ANALYSIS OUTFITS, Including Hardness Testers

Barnstead Still & Ster. Co
Beckman Instruments
Bogue Electric
Burrell Corp.
Fisher Scientific
G. M. Mfg. Co.
Hagan Chem. & Controls
Hallikainen Inst.
Hellige, Inc.
Howe & French, Inc
Industrial Instrs. Inc.
La Motte Chem. Prods
Palo Lab. Supplies
Permutit Co.
Phipps & Bird
Precision Scientific
Scientific Glass App.
Taylor & Co., W. A.
Victoreen Instr. Co.
Wallace & Tiernan

WATER and SEDIMENT APPARATUS

Automatic Steam Products
B-I-F Industries
Barnstead Still & Ster. Co
Bogue Electric
Central Scientific
Davis Reg. Co.
G. M. Mfg. Co.
Greiner, Emil
Hagan Chem. & Controls
Henry Valve
Infilco Inc.
Instruments Corp.
Kontes Glass
Labline, Inc.
Owens-Illinois
McAlear Mfg. Co.
Precision Scientific
R. K. L. Valve & Mfg. Co
Wallace & Tiernan, Inc.
Weston Instrs.

WATER BATHS, Constant Temperature, see Baths, also Laboratory Apparatus, also Temperature Calibration

WATER METERS, see Flowmeters, Positive Displacement.

WATER METER TESTERS, see Flow Calibrators

WATER WORKS INSTRUMENTS (see also Waste Treatment Instruments)

Auqua Surevy & Instr.
B-I-F Industries
Bailey Meter Co.
Barton Instr. Co.
Beckman Insts. Div.
Bristol Co.
Brooks Rotameter Co
Builders-Providence
B W Controller Corp.
Computer Measurements
Consolidated Vacuum Corp.
Falcon Alarm Co.
Femco, Inc.
Fischer & Porter Co.
Fisher Research Lab.
Foster Engrg. Co.
Foxboro Co
Greiner, Emil
Gurley, W. & L. E.
Hagan Chem. & Controls
Harshaw Scientific Div.
Industrial Instrs.
Instrs. Corp.
Kates Co., W. A.
King Engrg. Corp.
Leeds & Northrup
Leupold & Stevens
Manning, Maxwell & Moore
Meriam Inst. Co.
Minneapolis-Honeywell Indust. Div.
Mason-Neilan Div.
New Jersey Meter Co.
Norwood Controls
Penn. Insts. Div.
Permutit Co.
Phoenix Precision Inst.
Shand & Jurs Co.
Simplex Valve & Meter
Sparling Meter Co.
Stewart Co., M. C.
Taller & Cooper
Trimount Instr. Co.
Uehling Instr. Co
Wallace & Tiernan
Warrick Co
Weksler Instrs.

WATTHOUR METERS

Associated Research
Duncan Electric
Electron Radar Prod.
Ferranti Electric
Foxboro Co.
GE, Apparatus Sales
Landis & Gyr
Roller-Smith
Sangamo Electric
Simpson Electric
Sticht Co.
Sun Electric Corp.
Veeder-Root
Westinghouse Electric

WATTHOUR METER TESTERS

Davenport Mfg. Co.
Ducan Elec. Mfg.
Eastern Spec. Co
Electron-Radar Prod
GE, Apparatus Sales
Hathaway Instr. Co.
Kahn & Co.
Knopp Inc.
Multi-Amp. Corp.
Rockwell Engrg. Co.
Sangamo Electric
Sorsensen & Co.
States Co
Westinghouse Electric

WATTMETERS, Clamp Type

Electro-Tech Equip.
GE Apparatus Sales
Martindale Electric
U. S. Gauge Div.
Weston Electcl. Instr.

WATTMETERS, Electrostatic

Amer. Mach. & Foundry
GE
Hickok Elec. Instruments
Sensitive Research Instr.

WATTMETERS, Indicating

Amer. Mach. & Foundry
Autocall Co.
Bristol Co
Electronic Instr. Co
Electro-Tech Equip.
Epic, Inc.
Fed. Telephone & Radio
Fluke Mfg. Co.
GE, Apparatus Sales
Hickok Electcl. Instr.
Industrial Test
Landis & Gyr
Niagara Elect. Instr.
Norton Electcl. Instr.
Physics Research
Precision Scientific
Radiation Inc.
Rawson Electcl. Instr
Roller-Smith Co.
Sensitive Res. Instr
Servonic Instruments
Simpson Electric
Sticht Co.
Sun Electric Corp.
Triplett Elect. Instr. Co
United Electric
United Optical Mfg.
Voltron Products
Welch Mfg. Co., W. M.
Westinghouse Electric
Weston Instrs.

WATTMETERS, Laboratory Standard

Bird Electronic
Cambridge Inst. Co.
Central Scientific
Computer Co. of Amer.
Cubic Corp.
Electrical Facilities Inc.
Electro-Tech Equip.
Epic, Inc.
GE, Apparatus Sales
Hickok Electcl. Instr. Co
Oltronix Co.
Physics Research
Rawson Electcl. Instr.
Roller-Smith Inst.
Sensitive Res. Instr.
Simpson Electric Co.
Triplett Electr. Instr.
United Optical Mfg.
Welch Mfg. Co., W. M.
Westinghouse Electric
Weston Instrs.

WATTMETERS, Microwave

Aircraft Armaments
Amerac, Inc.
BJ Electronics
Bird Electronic
Brunswick Instruments
Chemalloy Electronics
Computer Co. of America
Cubic Corp.
DeMornay-Bonardi, Inc.
Electron-Radar Prods.
F-R Machine
Fed. Telephone & Radio
G. W. Associates
Hewlett-Packard
Hycon Mfg. Co.
Kearfott Co.
Marconi Instruments
Narda Corp.
New London Instr. Co.
Polytechnic Res. & Dev. Co
Radiation, Inc.
RCA
Roller-Smith
Sierra Electronic Corp
Sperry Gyroscope Co.
WacLine, Inc.
Weinschel Engrg. Co.

WATTMETERS, Reactive

Bristol Co.
Esterline-Angus
GE, Apparatus Sales
Landis & Gyr
Physics Research
Roller-Smith
United Optical Mfg.
Westinghouse Electric

WATTMETERS, Recording

Amer. Mach. & Foundry
Bristol Co.
Electro-Tech Equip.
Engrg. Enterprises
Esterline-Angus
GE, Apparatus Sales
Hathaway Instr. Co
Hickok Electcl. Instr.
Roller-Smith
Sangamo Electric
Sensitive Research Instr.
Sticht Co.
Westinghouse Electric

WAVEGUIDES, see Microwave

WAVE METERS, see Frequency Indicators

WAX MELTING APPARATUS

Central Scientific
Devtronics, Inc.
Electric Hotpack Co
Fisher Scientific
Greiner, Emil
Hacker & Co., W. J
Hycon Mfg. Co.
Indust. Engrg. Corp
Koehler Instr. Co
Mason Instr. Co.
Precision Scientific
R. K. L. Valve & Mfg. Co
Robinson Co., E. E.
Temperature Engrg
Weston Instrs.

WAXES

Bakelite Div.
Bethlehem Apparatus Co
Carbon & Carbide Chem.
Du Pont
Durez Plastics
Huisking & Co.
Mitchell Rand Insulating
Nye, Inc., William F.
Sherwin-Williams Co.
Teichert Engrg. Co.
Zophar Mills, Inc.

WEATHERING TESTERS see Environmental Test Chambers, also Fading Testers

WEATHERING MACHINES

Amer. Paulin System
Atlas Electric Devices
Rush Assoc., G. F
G.M. Mfg. Co.
Mast Devel
Temperature Engrg.
Thermometer Corp.
Wallace & Tiernan, Inc.

WEIGHING BOTTLES

Ace Glass
Exact Weight Scale Co
Fisher Scientific
Greiner, Emil
Kimble Glass Co
Kontes Glass
Owens-Illinois

WEIGHING SCALES, Basic Weight

Amthor Testing Instr. Co
Baldwin-Lima-Hamilton
Becker Div., Christian
Cady & Co., E. J
Chatillon & Sons
Detecto Scales, Inc
Dillon & Co., W. C.
Dynametric Corp.
Exact Weight Scale
Fairbanks, Morse & Co
Gilmore Industries
Gurley, W. & L. E.
Hadley Assocs.
Howe Scale
Kent Cliff Labs. Div
Link Engrg. Co
Martin-Decker Corp
Ohaus Scale
Pneumatic Scale
Richardson Scale
Seederer-Kohlbusch
Streeter-Amet
Testing Machines, Inc
Thayer Scale & Engrg.
Thwing-Albert
Toledo Scale
Triner Scale & Mfg
Troemner Co., Henry

WEIGHING SCALES, Beam

Amer. Balance
Chatillon & Sons
Detecto Scales
Dynametrics Corp.
Exact Weight Scale
Fairbanks, Morse & Co
Howe Scale
Jacobs Bros Co., Inc.
Kent Cliff Labs. Div.
Mettler Inst. Corp.
Ohaus Scale
Pacific Scientific
Photoswitch, Inc.
Pneumatic Scale
Revere Copper & Brass
Schaar & Co.
Seedburo Equipt.
Seederer-Kohlbusch
Testing Machines, Inc.
Thayer Scale & Engrg.
Triner Scale & Mfg.
Troemner Co., Henry
Welch Mfg. Co., W. M.

WEIGHING SCALES, Conveyor

B-I-F Industries
Baldwin-Lima-Hamilton
Bell Automation Corp.
Builders-Providence
Chatillon & Sons
Detecto Scales
Dillon & Co., W. C.
Exact Weight Scale
Fairbanks, Morse & Co.
Gilmore Industries
Hadley Assocs.
Hagan Chem. & Controls
Howe Scale
Industrial Electronics
International Bus. Mach
Martin-Decker Corp.
Merrick Scale Mfg. Co
Monsell, J R
Omega Machine
Revere Copper & Brass
Richardson Scale
Schaffer Poidometer Co
Streeter-Amet
Thayer Scale & Engrg
Toledo Scale
Trans-Weigh
Triner Scale & Mfg
Wallace & Tiernan

WEIGHING SCALES, Counting

Amthor Testing Inst. Co
Avion Div.
B-I-F Industries
Chatillon & Sons
Detecto Scales
Dynametrics Corp.
Exact Weight Scale
Fairbanks, Morse & Co.
Gilmore Industries
Hadley Assocs.
Howe Scale
Industrial Electronics
International Bus. Mach
Jacobs Bros. Co., Inc.
Kent Cliff Labs. Div.
Metrogram Corp.
Monsell, J. R.
Ohaus Scale
Potter Inst. Co.
Seederer-Kohlbusch
Taller & Cooper, Inc
Thayer Scale & Engrg
Toledo Scale
Torsion Balance
Triner Scale & Mfg.

WEIGHING SCALES, Crane

Baldwin-Lima-Hamilton
Chatillon & Sons
Detecto Scales
Dillon & Co., W. C.
Emery Co., A. H.
Fairbanks, Morse & Co.
Gilmore Industries
Howe Scale Co.
Hydroway Scales
Martin-Decker Corp.
Streeter-Amet
Taller & Cooper Inc.
Thayer Scale & Engrg.
Toledo Scale
Triner Scale & Mfg.

WEIGHING SCALES, Differential

Baldwin-Lima-Hamilton
Detecto Scales.
Dynametrics Corp.
Exact Weight Scale
Fairbanks, Morse & Co.
Gilmore Industries
Howe Scale
Jacobs Bros. Co., Inc.
Kent Cliff Labs. Div.
Metrogram Corp.
Monsell, J. R.
Taller & Cooper
Testing Machines Inc.
Thayer Scale & Engrg.
Thwing-Albert
Triner Scale & Mfg.

WEIGHING SCALES, Dynamometer

Central Scientific Co
Chatillon & Sons
Conoflow Corp.
Detecto Scales
Dillon & Co., W. C
Emery Co. A. H.
Exact Weight Scale
Fairbanks, Morse & Co
Gilmore Industries
Hagan Chem. & Controls
Howe Scale
Link Engrg. Co.
Martin-Decker Corp.
Maymer Corp.
Monsell, J. R.
Republic Flow Meters
Ruge Assocs.
Seederer-Kohlbusch
Stoelting Co., C. N.
Taller & Cooper
Testing Machines, Inc
Toledo Scale
Welch Mfg. Co., W. M

WEIGHING SCALES, Hopper

B-I-F Industries
Baldwin-Lima-Hamilton
Chatillon & Sons
Detecto Scales
Dynametrics Corp.
Emery Co., A. H.
Exact Weight Scale
Fairbanks, Morse & Co
Gilmore Industries
Hadley Assocs.
Howe Scale
Industrial Electronics
Jacobs Bros. Co.
Monsell, J. R.
Revere Copper & Brass
Richardson Scale Co.
Ruge Assocs.
Seedburo Equipment
Streeter-Amet
Taller & Cooper
Thayer Scale & Engrg.
Toledo Scale
Triner Scale & Mfg.

WEIGHING SCALES, Laboratory

Ace Glass Co.
Amer. Balance
Becker Div., Christian
Central Scientific
Chatillon & Sons
Chicago Apparatus Co.
Detecto Scales
Dietert Co.
Dynametrics Corp.
Eberbach Corp.
Exact Weight Scale
Fairbanks, Morse & Co
Fisher Scientific
General Biological
Gilmore Industries
Goetze Niemer Co.
Greiner, Emil
Hadley Assocs
Heusser Instr. Mfg. Co
Howe Scale
Humboldt Mfg. Co
International Bus. Mach
Jacobs Bros. Co., Inc
Kent Cliff Labs Div.
LaPine & Co.
Metrogram Corp.
Mettler Inst. Corp.
Microchemical Service
Ohaus Scale Corp.
Roller-Smith Corp.
Schaar & Co.
Seedburo Equipment
Seederer-Kohlbusch
Sklar Des. Dev. Labs
Standard Science Supply
Taller & Cooper
Testing Machines, Inc.
Thompson Balance
Toledo Scale
Torsion Balance
Triner Scale & Mfg.
Troemner Co., Henry
Voland & Sons
Welch Mfg. Co., W. M
Wilkens-Anderson

WEIGHING SCALES, Platform

Baldwin-Lima-Hamilton
Becker Div., Christian
Chatillon & Sons
Detecto Scales
Dynametrics Corp.
Eckman Load Ind
Exact Weight Scale
Fairbanks, Morse & Co
Gilmore Industries
Hadley Assocs.
Howe Scale
Humboldt Mfg. Co
International Bus. Mach
Monsell, J. R.
Revere Corp. of Amer.
Ruge Assocs.
Seedburo Equipment
Streeter-Amet
Taller & Cooper
Testing Machines, Inc
Thayer Scale & Engrg
Toledo Scale
Triner Scale & Mfg.
Weighing & Control Comps

WEIGHING SCALES, Portable

Black & Decker
Central Scientific
Chatillon & Sons
Detecto Scales
Dillon & Co., W. C.
Dynametrics Corp.
Emery Co., A. H.
Exact Weight Scale
Fairbanks, Morse & Co
Gilmore Industries
Howe Scale
Hunter Spring Co.
International Bus. Mach
Jacobs Bros. Co., Inc.
Martin-Decker Corp.
Pelouze Mfg. Co.
Revere Copper & Brass
Revere Corp. of Amer.
Richardson Scale
Seedburo Equipment
Seederer-Kohlbusch
Streeter-Amet
Taller & Cooper
Testing Machines, Inc
Thayer Scale & Engrg.
Toledo Scale
Torsion Balance
Triner Scale & Mfg.
Troemner Co., Henry
Voland & Sons
Wallace & Tiernan, Inc.
Welch Mfg. Co., W. M.

WEIGHING SCALES, Predetermined Weight

Automatic Scale
Avion Div.
Bell Automation Corp.
Chatillon & Sons
Detecto Scales
Dynametrics Corp.
Exact Weight Scale
Fairbanks, Morse & Co.
Gilmore Industries
Hadley Assocs.
Howe Scale
Indust. Electronic Engrs.
Industrial Electronics
International Bus. Mach
Jacobs Bros. Co., Inc.
Kent Cliff Labs. Div.
Merrick Scale Mfg. Co.
Metrogram Corp.
Monsell, J. R.
Pneumatic Scale Corp.
Revere Copper & Brass
Richardson Scale
Schaffer Poidometer Co.
Seederer-Kohlbusch

Streeter-Amet
Taller & Cooper
Thayer Scale & Engrg
Toledo Scale
Torsion Balance
Triner Scale & Mfg.
Wallace & Tiernan

WEIGHING SCALES, Recording and/or Remote Indicating, including Printout

Allegany Instr. Co.
Amer. Mach. & Foundry
Autom. Scale
Avion Div.
B-I-F Industries
Baldwin-Lima-Hamilton
Becker Div., Christian
Bell Automation Corp
Builders-Providence
Chatillon & Sons
Conoflow Corp.
Daytronic Corp
Detecto Scales
Dynametrics Corp.
Eckman Load Ind.
Emery Co., A. H.
Exact Weight Scale
Fairbanks, Morse & Co
Fielden Research
Gerber Scientific
Gilmore Industries
Hadley Assocs
Hagan Corp.
Howe Scale
Indust. Electronic Engrs.
Industrial Electronics
International Bus. Mach
Jacobs Bros. Co., Inc.
Jeffrey Mfg. Co.
Martin-Decker Corp
Merrick Scale Mfg. Co
Moister Register Co
Monsell, J. R.
Omega Machine
Republic Flow Meters
Revere Copper & Brass
Revere Corp. of Amer.
Richardson Scale
Rockwell Engrg
Ruge-de Forest, Inc.
Schaffer Poidometer Co
Seedburo Equipment
Sheffield Corp.
Streeter-Amet
Taller & Cooper
Thayer Scale & Engrg
Toledo Scale
Torsion Balance
Trans-Weigh Co
Triangle Package Mach
Triner Scale & Mfg.
Troemner, Henry
Virginia Electronics
Wallace & Tiernan
Weighing & Control Comps.

WEIGHING SCALES, Rolling Mill

Askania Reg. Co.
Avion Div.
Baldwin-Lima-Hamilton
Bin-Dicator
Bristol Co.
Builders-Providence
Chatillon & Sons
Cleveland Fuel
Daytronic Corp.
Detecto Scales
Dynametrics Corp.
Electronic Prods. Co
Fairbanks, Morse & Co
Fielden Instr. Div.
Fuller Co.
Gaydon Co
General Controls
Gilmore Industries
Howe Scale
Industrial Elect. Controls
Indust. Electronic Engrs.
Instruments Inc.
Jarco Services
Jeffrey Mfg. Co
Lumenite Electronic Co
Merrick Scale
Mosher Electronic
Nuclear Research Corp
Ohmart Corp.
R-C Scientific Inst. Co
Richardson Scale
Robinette Co., W. C
Shallcross Controls
Streeter-Amet Co.
Synchro-Start Products
Taller & Cooper, Inc.
Techniflex Corp.
Toledo Scale Co.
Triner Scale & Mfg.
United Engineers
Viking Instruments
Worner Electronic Devices

WEIGHT CONTROLLERS Bulk Material

Amer. Mach. & Foundry
Avion Div.
B-I-F Industries
Baldwin-Lima-Hamilton
Bell Automation
Daytronic Corp.
Detecto Scales
Dynametrics Corp.
Exact Weight Scale
Fairbanks, Morse & Co
Gilmore Industries
Indust. Electronic Engrs
Isotope Products, Inc.
Jeffrey Mfg.
Photobell Co
R.K.L. Valve & Mfg. Co
Revere Corp. of Amer.
Richardson Scale Co.
Syntron Co.

Taller & Cooper, Inc
Thayer Scale & Engrg
Toledo Scale Co.
Triner Scale & Mfg
Wallace & Tiernan, Inc

WEIGHT INDICATORS Automatic Recording

Amer. Mach. & Foundry
Automation Management
Avion Div.
B-I-F Industries
Baldwin-Lima-Hamilton
Bell Automation Corp.
Bristol Co.
Builders-Providence
Cameron Iron Works
Chatillon & Sons
Curtiss Wright
Daytronic Corp
Detecto Scales
Dillon & Co., W. C
Dynametrics Corp.
Eckman Load Ind
Electrical Dev.
Exact Weight Scale
Fairbanks, Morse & Co
Gilmore Industries
Howe Scale
Indust. Electronic Engrs
International Bus. Mach
Isotope Products, Inc.
Leeds & Northrup
Martin-Decker Corp
Merrick Scale Mfg. Co
Nuclear Research Corp
Polyphase Instr. Co
Revere Corp. of Amer.
Richardson Scale Co
Robertshaw-Fulton Co
Roller-Smith
Streeter-Amet
Taller & Cooper
Tech. Oil Tool Corp
Thayer Scale & Engrg
Toledo Scale
Triner Scale & Mfg.
Virginia Electronics
Wallace & Tiernan
Wiancko Engrg. Co.

WEIGHTS, Analytical

Ace Glass
Ainsworth & Sons
Aloe Co., A. S
Amer. Balance
Becker Div., Christian
Central Scientific
Detecto Scales
Dietert Co.
Exact Weight Scale
Fisher Scientific
Greiner, Emil
Gurley, W. & L. E
Hadley Assocs
Howe Scale
Kent Cliff Labs. Div
Mettler Inst. Corp.
Ohaus Scale
Roller Smith
Schaar & Co.
Seedburo Equipment
Seederer-Kohlbusch
Standard Science Supply
Taller & Cooper
Testing Machines, Inc
Thompson Balance
Torsion Balance Co.
Triner Scale & Mfg.
Troemner Co., Henry
Voland & Sons, Inc

WEIGHTS, Avoirdupois, Metric or Troy

Ace Glass
Ainsworth & Sons
Amer. Balance
Becker Div., Christian
Brinkmann Instruments
Burke & James
Central Scientific Co.
Chicago Apparatus Co
Detecto Scales
Exact Weight Scale
Fisher Scientific
Gaertner Scientific
Greiner, Emil
Gurley, W. & L. E
Hadley Assocs.
Howe Scale
Humboldt Mfg. Co.
Kent Cliff Labs. Div
Metrogram Corp.
Mettler Inst. Corp.
Ohaus Scale Corp.
Seederer-Kohlbusch
Standard Science Supply
Suter, Alfred
Thompson Balance
Toledo Scale
Torsion Balance Co.
Triner Scale & Mfg
Troemner Co., Henry
Voland & Sons, Inc.

WEIGHTS, Test, see Weights, Avoirdupois, Metric or Troy

WEIGHTS & MEASURES, Precision Standard

Amer. Balance
Burrell Corp.
Detecto Scales
Gurley, W. & L. E.
Hadley Assocs.
Jacobs Bros. Co.
Kent Cliff Labs. Div.
Ohaus Scale
Pfaltz & Bauer, Inc.
Seederer-Kohlbusch
Seraphin Test Measure
Thompson Balance Co.
Torsion Balance Co.
Triner Scale & Mfg.
Troemner, Henry
Voland & Sons
Webber Gage Co.

WEIR METERS, see Flowmeters, Open Channel

WELDERS, Automatic

Aronson Machine Co
Ewald Instruments
Federal Mach. & Weld.
Federal Tool Engrg Co
GE Apparatus Sales
Gulton Industries
Kahle Engrg. Co.
Linde Co.
Metal & Thermit
Peer, Inc
Raytheon Mfg. Co.
Sheffield Corp
Thermo Prods. Co.
Unitek Corp.
Vacuum Tube Prods. Co
Vickers, Inc.
Westinghouse Electric

WELDING EQUIPMENT, Control Systems

Allen-Bradley Co.
Amer. Gas Accumulator
Automatic Methods
Bastian Blessing
Booth Co., Arthur E.
Cramer Contr. Co.
Cutler-Hammer
Dietz Co., Henry G.
Electronic Controls
Electronic Prods. Co.
Electronics Corp. of Amer.
Electvme Motor Prods.
Ewald Instruments
Elgin Natl. Watch
Farmer Electric
Federal Mach. & Weld.
Federal-Tool Engrg. Co.
Fisher Governor Co.
General Control (Mass.)
GE, Apparatus Sales
GE, Specialty Contrls.
Grove Valve & Regu. Co
Hoke, Inc.
Industrial Timer
Kahle Engrg. Co.
Linde Co.
Lumenite Electronic
Metal & Thermit
Mullenbach Div.
National Time & Signal
New Haven Clock
Peer, Inc.
Polyphase Instr. Co
Photovolt Corp.
Raytheon Mfg. Co.
Research, Inc
Robotron Corp.
Sciaky Bros., Inc.
Square D Co
Stewart Instr. Co
Timetrol Co.
Vacuum Tube Prods
Vickers, Inc
Wilson & Co., G. C
Worthington Corp.

WELDING EQUIPMENT, Oxyacetylene

Bastian-Blessing
Grammes & Sons
Linde Co.
National Cylinder Gas

WELDING EQUIPMENT, Spot

DoAll Co.
Ewald Instruments
Federal Mach. & Welder
Federal Tool Engrg. Co
Fusion Engrg. Co
Grammes & Sons, Inc
Kahle Engrg. Co
Linde Co.
Mallory & Co., P. R.
National Cylinder Gas
Peer, Inc.
Raytheon Mfg. Co
Research, Inc
Sciaky Bros., Inc.
Sittler Corp
Unitek Corp.
Vacuum Tube Prods. Co
Webster Instrument, Inc.
Weldmatic Div.
Westinghouse Electric

WELDING EQUIPMENT, Stored-Energy

Ewald Instruments
Federal Tool Engrg. Co
Fruengel, Inc.
Kahle Engrg. Co
Raytheon Mfg. Co.
Thermo-Products
Unitek Corp.
Vacuum Tube Prods. Co
Weldmatic Div.

WELLS, Thermocouple or Thermometer, see Thermowells

WHEELS, Sapphire, Grinding & Burnishing

Alpha American Corp.
Bird & Co., Richard H.
Blanchard Machine Co.
Elgin National Watch
Engis Equipment
Fish Schurman
Gatti, Inc., Aurele M
Greenlee Co.
Industrial Abrasives
Jadow Inc., B.
North Amer. Philips Co.
Powers, Geo.
Raybestos-Manhattan
U.S. Rubber Co.
Vallorbs Jewel
Worley Jewel Co., John

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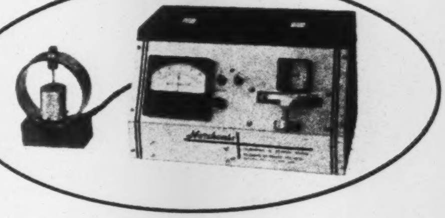

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Bristol Co.
Hill & Co., E. Vernon
Selsi Co., Inc.
Precision Thermom.
Teichert Engrg. Co.
Taylor Instr. Cos

WIND DIRECTION and VELOCITY INDICATORS and or RECORDERS, see Meteorological Instruments, also Anemometers

WIND TUNNEL INSTRUMENTS

Aero Research Instr. Co
Aerotech Specialties
Airborne Instruments
Airflo Instr. Co.
Askania Reg. Co
Astra Tech. Instr.
Barton Instr.
Bendix, Friez Instr. Div
Benson-Lehner Corp
Bristol Co.
Bronoaties Co.
Cal-Ohm Labs.
Century Electronics & Insts
Colvin Labs., Inc.
Conoflow Corp.
Dayton Instruments
Electrical Dev.
Fischer & Porter Co
Fish-Schurman
Franklin Electronics
Flow Corp.
Gaertner Scientific
Genisco Inc.
Giannini & Co
Gilmore Industries
Hagan Chem. & Controls
Hanson-Gorrill-Brian
Hastings Instr. Co.
Hill & Co., E. Vernon
Huggins Labs.
Ideal Lab. Tools
Illinois Testing Labs
Industrial Electronics
Instrument Lab., Inc.
Jarrell-Ash
King Eng.
Kistler Instr. Co.
Kybernetes Corp.
Laboratory Optical
Leeds & Northrup
Manning, Maxwell & Moore
North American Instr.
Oltronix Co.
Palos Optical Co.
Penn Insts. Div.
Potter Instrument
Scientific Instr. Co
Statham Labs.
Stratex Instr. Co.
Taller & Copper, Inc.
Task Corp.
Taylor Instr. Cos.
Tinsley Labs.
Toledo Scale
Trimount Instr. Co.
Topp Industries, Inc.
Unertl Optical Co., John
Wallace & Tiernan, Inc.
Westberg Mfg. Co
Wiancko Engrg. Co.

WIRE, Aluminum

Acme Wire Co.
Aluminum Co. of Amer.
American Brass Co.
Anaconda Wire & Cable
Belden Mfg. Co.
Chester Cable Corp.
Cohn Corp., Sigmund
Driver Co., Wilbur B
Essex Wire Corp.
General Alloy Co.
Hubbell Metals
Magnet Wire Div.
Nesor Alloy Prods.
North Amer. Phillips Co
Okonite Co.
Paul & Stein Bros.
Precision Tube Co.
Rea Magnet Wire Co.
Reynolds Metals Co.
Roebling's Sons Co.
Rome Cable Corp.
Secon Metals Corp
Sigmund Cohn Mfg. Co.
Uniform Tubes

WIRE, Beryllium Copper and Copper

Belden Mfg. Co.
Beryllium Corp.
Cohn Corp., Sigmund
Driver Co., Wilbur B.
Everett Prods. Inc.
Instrument Specialties
Little Falls Alloys
Magnet Wire Div.
Mallory & Co., P. R.
Nesor Alloy Prods.
Scovill Mfg. Co.
Secon Metals Corp.
Sylvania Elct. Prod.
Warren Wire
Wilson Co., H. A.

WIRE, Copper, Enameled

Acme Wire Co.
Amer. Brass Co.
Anaconda Wire & Cable
Belden Mfg. Co.
Birnbach Radio Co.
Cohn Corp., Sigmund
Electric Auto-Lite Co.
E-Nam Corp.
Essex Wire Corp.
GE
GE Const. Materials Div.
General Winding Co.
Gordon Co., Claud S.
Hitemp Wires, Inc.
Insuline Corp.
Magnet Wire Div.
Newark Electric Co
North Amer. Philips Co.
Okonite Co.
Rea Magnet Wire Co.
Roebling's Sons Co.
Secon Metals Corp
Stretch Wire Corp.
Thermo Nuclear Wire Indus.
Warren Wire Co.
Wheeler Electronic Corp.

WIRE, Covered

Acme Wire Co.
Amer. Brass Co.
Anaconda Wire & Cable
Belden Mfg. Co.
Boston Insul. Wire
Birnbach Radio Co.
Brand & Co., William
Chester Cable Corp.
Continental Wire
Crescent Insd. Wir. & Cbl
Driver-Harris Co.
E-Nam Corp.
Essex Wire Corp.
GE
GE Const. Materials Div.
Gordon Co., Claud S.
Hitemp Wires, Inc.
Insuline Corp.
Kolled Kords, Inc.
Lenz Elect. & Mfg. Co.
Lewis Engrg. Co.
Magnet Wire Div.
Newark Electric Co.
Okonite Co.
Precision-Made Prods.
Rockbestos Prods. Corp.
Roebling's Sons Co
Rome Cable Co.
Secon Metals Corp.
Sequoia Wire
Surprenant Mfg. Co.
Tensolite Insul. Wire Co.
Thermax Wire
Thermo Nuclear Wire Indus
U. S. Rubber Co.
Warren Wire.
Wheeler Electronic Corp.
Whitney Blake

WIRE, Extruded

All-States Welding Alloys
Alpha Metals, Inc.
Amer. Brass Co.
Amer. Super-Temp. Wires
Anaconda Wire & Cable
Baker & Co., Inc.
Belmont Smlt. & Refg
Birnbach Radio Co.
Brand Co.

Super-Temp

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Cherry-Channer Corp.
Chester Cable Corp.
Continental Wire
Detroit Gasket & Mfg.
Essex Wire Corp.
General Electric Co.
GE Const. Materials Div.
Gordon Co., Claud S
Hitemp Wires, Inc.
International Nickel
Lenz Elect. & Mfg. Co
Magnet Wire Div.
Okonite Co.
Phalo Plastics
Progress Electronic
Rockbestos Prods. Corp.
Roebling's Sons Co.
Scovill Mfg. Co.
Stretch Dire Corp.
Surprenant Mfg. Co.
Tensolite Insul. Wire Co.
Thermax Wire Corp.
Thermo Nuclear Wire Indus
Warren Wire Co.

WIRE, Fine, Electroplated

Chester Cable Corp.
Cohn Corp., Sigmund
Crucible Steel Co.
Magnet Wire Div.
North Amer. Phillips Co.
Red Magnet Wire Co.
Rome Cable Corp.
Secon Metal Corp.
Sequoia Wire Div.
Sylvania Elect. Prods.

WIRE, Fuse

Alpha Metals, Inc.
Baker & Co., Inc.
Bussmann Mfg. Div.
Cohn Corp., Sigmund
GE
Nesor Alloy Prods. Co
Roebling's Sons Co.
Secon Metal Corp.

WIRE, Insulated, all insulations except enameled and refractory

Acme Wire Co.
Aero Res. Instr. Co
Amer. Brass Co.
Amer. Super-Temp. Wires
Amphenol Electronics
Anaconda Wire & Cable
Bakelite Corp.
Belden Mfg. Co.
Birnbach Radio Co.
Blake Co., Whitney
Boston Insul. Wire
Brand & Co., William
Carpenter Steel Co.
Chester Cable Corp.
Collyer Indus. Wire
Continental Wire
Crescent Insul. Wire
Driver Co., Wilbur B
Driver-Harris Co.
Electric Auto-Lite Co.
E-Nam Corp.
Essex Wire Corp.
Federal Tel. & Rad.
GE
GE Const. Materials Div.
Gordon Co., Claud S.
Haveg Industries
Hitemp Wires, Inc.
Jelliff Mfg. Corp.
Koiled Kords, Inc.
Lenz Elect. & Mfg.
Lewis Engrg. Co.
Magnet Wire Div.
Newark Electric Co.
Okonite Co.
Phalo Plastics Corp
Precision-Made Prods.
Pyro-Electric
Rea Magnet Wire
Revere Corp. of Amer.
Rex Corp.
Rockbestos Prods. Corp.
Roebling's Sons Co.
Rome Cable Co.
Sequoia Process Corp.
Secon Metals Corp.
Stretch Wire Corp.
Surprenant Mfg. Co
Tensolite Insul. Wire Co
Thermax Wire Corp.
Thermo Nuclear Wire Indus
U. S. Rubber Co.
Warren Wire Co.
Watertown Mfg. Co
Wheeler Electronic Corp.
Whitney Blake Co.

WIRE, Invar

Acme Wire Co.
Carpenter Steel Co
Crucible Steel Co. of Amer
Driver-Harris Co.
Elect. Auto-Lite Co.
Ferner Co., R. Y.
Hamilton Watch
Thermo Nuclear Wire Indus
Universal-Cyclops
Wilson Co., H. A.

WIRE, Kovar

Driver Co., Wilbur B.
Driver-Harris Co.
Stupakoff Div.
Sylvania Elect. Prods.
Thermo Nuclear Wire Indus
Universal-Cyclops

WIRE, Laminated

General Plate Div.
Kellogg Switchbd. & Sup.
Secon Metal Corp.
Wilson Co., H. A.

WIRE, Magnet

Acme Wire Co.
Allegheny Ludlum Steel
American Brass Co.
Amer. Super-Temp. Wires
Anaconda Wire & Cable
Belden Mfg. Co.
Birnbach Radio Co.
Chase Brass & Copper
Crescent Insd. Wir. & Cbl.
Crucible Steel Co. of Am.
Electric Auto-Lite Co.
Essex Wire Corp.
GE
GE Const. Materials Div.
General Winding Co.
Hitemp Wires, Inc.
Magnet Wire Div.
Newark Electric Co.
North Amer. Philips Co.
Okonite Co.
Precision-Made Prods.
Rea Magnet Wire Co.
Rockbestos Prods. Corp.
Roebling's Sons Co.
Rome Cable Co.
Secon Metals Corp.
Sprague Electric Co
Sylvania Elect. Prods.
Tensolite Insul. Wire Co.
Thermo Nuclear Wire Indus
Warren Wire Co.
Wheeler Electronic Corp.

WIRE, Metal Shielded

Airflo Instr. Co.
Alpha Metals, Inc.
Amer. Brass Co.
Amer. Super-Temp. Wires
Anaconda Wire & Cable
Birnbach Radio Co.
Boston Insul. Wire
Breeze Corps.
Chester Cable Corp.
Collyer Indus. Wire
Continental Wire
Crescent Insd. Wir. & Cbl.
Elect. Auto-Lite Co.
GE
GE Const. Materials Div.
Hitemp Wires, Inc.
Koiled Kords, Inc.
Lenz Elect. & Mfg. Co.
Lewis Engrg. Co.
Magnet Wire Div.
Microdot, Inc.
Newark Electric Co.
Precision-Made Prods.
Precision Tube Co.
Pyro-Electric
Rockbestos Prods. Corp.
Roebling's Sons Co.
Rome Cable Corp.
Sequoia Wire
Surprenant Mfg. Co
Thermax Wire Corp.
Uniform Tubes, Inc.
Warren Wire Co.
Whitney Blake Co.
Wilson Co., H. A.

WIRE, Miscellaneous, including Bismuth, Columbium, Illium, Molybdenum, special alloy Tantalum

Alpha Metals, Inc.
Anaconda Wire & Cable
Baker & Co., Inc.
Belmont Smg. & Rfg.
Bishop & Co., J.
Cerro de Pasco Corp.
Cleveland Tungsten
Crucible Steel Co. of Amer.
Division Lead Co.
Driver Co., Wilbur B.
Easton Mfg. Co.
Electronic Parts Mfg.
Fansteel Metallurgical
Fitzpatrick Electric
  Supply Co.
GE, Lamp Wire Dept.
Haynes Stellite Co.
Kemet Div.
Mallory & Co., P. R.
North Amer. Philips
Stretch Wire Corp.
Sylvania Elec. Prod., Inc.
Westinghouse Electric

WIRE, Music, see Wire, Spring

WIRE, Nickel, Monel and Nickel Chromium

Amer. Chain & Cable
Bishop & Co., J.
Carpenter Steel Co.
Cohn Corp., Sigmund
Crucible Steel of Amer.
Driver Co., Wilbur B.
Driver-Harris Co.
Eaton Mfg., Rel. Div.
Elgin Nat'l. Watch Co.
General Alloy Co., Inc.
General Plate Co.
Hamilton Watch
Haynes Stellite Co.
Jelliff Mfg. Corp., C. O.
Jessop Steel Co.
Kanthal Corp.
Michigan Steel Casting
Nesor Alloy Prods. Co.
North Amer. Phillips Co.
Precision Resistor Co.
Sylvania Elec. Prod., Inc.
Thermo Nuclear Wire Indus.
Universal-Cyclops

WIRE, Refractory Insulated

Aero Research Instr. Co
Airflo Instr. Co.
American Wire Div.
Harco Laboratories
Pyro-Electric
Roebling's Sons Co.
Stupakoff Ceramic & Mfg.

WIRE, Resistance (Platinum or Platinum-Iridium)

Amer. Electro-Metal
Amer. Platinum Works
Baker & Co
Bishop & Co., J.
Chester Cable Corp.
Cohn Corp., Sigmund
Fineisen, A. R.
General Plate Div.
Gordon Co., Claud S.
Mallory & Co., P. R.
Newark Electric Co
Ney Co., J. M.
Secon Metal Corp.
Sylvania Elect. Prods
Thermo Nuclear Wire Indus
Thwing-Albert
Wilson Co., H. A.

WIRE, Resistance, except Platinum and Platinum-Iridium

Allegheny Ludlum Steel
Baker & Co., Inc.
Bishop Platinum Works
Carpenter Steel Co.
Cohn Corp., Sigmund
Crucible Steel of Amer.
Driver Co., Wilbur B.
Driver Harris Co.
General Plate Co.
General Winding Co.
Jelliff Mfg. Co., C. O.
Kanthal Corp.
Lewis Engrg. Co.
Ney Co., J. M.
North Amer. Philips Co
Precision Resistor Co.
Riverside Metal Co.
Roebling's Sons Co.
Schnitzer Alloy Prods.
Secon Metals Corp.
Universal-Cyclops

WIRE, Round Edge, Flat, Nickel or Chromium Finished

American Brass
Amer. Chain & Cable
Amer. Nickeloid Co.
Amer. Steel & Wire
Crucible Steel Co. of Am.
Driver Co., Wilbur B.
Driver-Harris Co.
Eaton Mfg. Co.
Jelliff Mfg. Corp.
Page Steel & Wire Div.
Secon Metals Corp.
Sigmund Cohn Mfg.
Sylvania Elect. Prods.

WIRE, Round Edge, Flat, Phosphor Bronze

Allied Prods. Div.
Amer. Brass Co.
Driver Co., Wilbur B.
Eaton Mfg., Rel. Div.
North Amer. Phillips Co
Pecision Prods. Co.
Roebling's Sons Co.
Scovill Mfg. Co
Secon Metals Corp.
Sylvania Elect. Prods.

WIRE, Sheared and Special Rolled

Allied Prods. Div.
Amer. Chain & Cable
Fineisen, A. R.
Precision Products Co
Roebling's Sons Co.
Secon Metals Corp.
Sigmund Cohn Mfg.
Stretch Wire Corp.

WIRE, Spring

Allegheny Ludlum Steel
Allied Prods. Div.
Amer. Brass Co.
Amer. Chain & Cable
Baker & Co., Inc.
Beryllium Corp.
Chase Brass & Copper
Chatillon & Sons
Crucible Steel of Amer.
Driver Co., Wilbur B.
Driver-Harris Co.
Eaton Mfg., Rel Div
Ferner Co., R. Y.
Gallien, R. P.
Halcomb Steel Co
Instr. Specialties Co.
Jadow, Inc.
Jessop Steel Co
Modern Technical
Page Steel & Wire Div.
Roebling's Sons Co.
Scovill Mfg. Co.
Sylvania Elect. Prods.
Universal-Cyclops
Watch-Motor Mainspring
Wilson Co., H. A.

WIRE, Stainless Steel, see Wire, Spring

WIRE, Swedish Music, see Wire, Spring

WIRE, Thermocouple, Base Metal

Aero Research Instr. Co.
Airflo Instr. Co.
Amer. Chain & Cable
Assembly Products
Baker & Co., Inc.
Barber-Colman
Boston Insul. Wire
Bristol Co.
Chester Cable Corp.
Cohn Corp., Sigmund
Continental Sensing
Driver Co., Wilbur B.
Driver-Harris Co.
Electro-Tech Equip.
Foxboro Co.
GE, Apparatus Sales
General Controls
General Plate Div.
Gordon Co., Claud S.
Harco Labs.
Illinois Testing Labs
Leeds & Northrup
Lewis Engrg. Co
Minneapolis-Honeywell
  Indust. Div.
Page Steel & Wire Div
Precision Tube Co.
Pyro-Electric
Pyrometer Co. of Amer
Pyrometer Instrument Co
Richards Co., Arklay S.
Tensolite Insul. Wire Co
Thermo-Electric Co
Thwing-Albert Inst.
Uniform Tubes
West Instr. Corp.
Winslow Co., Inc.

WIRE, Thermocouple, Rare Metal

Aero Research Instr. Co
Amer. Platinum Works
Baker & Co., Inc.
Barber-Colman
Bishop Platinum Works
Bishop & Co., J.
Boston Insul. Wire
Bristol Co.
Cohn Corp. Sigmund
Continental Sensing
Electro-Tech Equip.
Foxboro Co.
General Controls
G. E. Apparatus Sales
General Plate Div.
Gordon Co. Claud S.
Hauco Labs.
Illinois Testing Labs.
Leeds & Northrup
Lewis Engrg. Co.
Minneapolis-Honeywell
  Indust. Div.
Pyro-Electric
Pyrometer Co. of Amer.
Pyrometer Instr. Co.
Richards Co., Arklay S
Secon Metal Corp.
Tensolite Insul. Wire Co
Thermo-Electric Co.
Thermo Nuclear Wire Indus
Thwing-Albert
Uniform Tubes
West Instr. Corp.
Wilson Co., A. H.
Winslow Co.

WIRE, Thermocouple, Special, High emf

Aero Research Instr. Co
Amer. Platinum Works
Baker & Co., Inc.
Barber-Colman
Bishop Platinum Works
Bristol Co.
Cohn Corp., Sigmund
Continental Sensing
Driver Co., Wilbur B.
GE, Apparatus Sales
Gordon Co., Claud S.
Harco Labs.
Lewis Engrg. Co
Pyro-Electric
Pyrometer Instr. Co.
Richards Co., Arklay S.
Secon Metal Corp.
Tensolite Insul. Wire Co.
Thermo-Electric Co
Thermo Nuclear Wire Indus
Uniform Tubes
Winslow Co., Inc.

WIRE, Tungsten

Cleveland Tungsten, Inc.
Electronic Parts Mfg.
Fansteel Metallurgical
GE, Lamp Wire Dept.
Mallory & Co., P. R.
North Amer. Phillips
Sylvania Elect. Prods.
Wilson Co., H. A.

WIRE, Wollaston (For Cross Wires)

Amer. Platinum Works
Baker & Co., Inc.
Bishop & Co., J.
Cohn Corp., Sigmund
Secon Metal Corp.

WIRE MEASURING GAGES, see Dimensional Gages

WIRE TESTING MACHINES

Amthor Testing Instr. Co
Amsler Buehler
Ann Arbor Inst. Wks.
Baldwin-Lima-Hamilton
Bush Associates, G. F.
Chatillon & Sons
Custom Scientific Inst.
Davenport Mfg.
Davis Electric
Detroit Testing Mach. Co
Dillon & Co., W. C.
GE
Gilmore Industries
Hacker & Co.
Hunter Spring Co.
Instron Eng. Corp.
Kahle Engrg. Co
Krouse Testing Mach.
Magnaflux Corp.
Manson Labs
Metrol, Inc.
Minneapolis-Honeywell
  Rubicon Instrs.
Norcross Corp.
Olsen Testing Machine
Peschel Electronics
Riehle Testing Machines
Scott Testers, Inc.
Standard Electric
Std. Electronic Res.
Steel City Testing Machs.
Taber Instr. Co.
Testing Machines, Inc.
Thwing-Albert

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Company ....

Company Address.............................. **City**.............................. **Zone**.................. **State**..............................

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Advertised Products

1	21	41	61	81	101	121	141	161	181	201	221	241	261	281	301	321	341	361	381
2	22	42	62	82	102	122	142	162	182	202	222	242	262	282	302	322	342	362	382
3	23	43	63	83	103	123	143	163	183	203	223	243	263	283	303	323	343	363	383
4	24	44	64	84	104	124	144	164	184	204	224	244	264	284	304	324	344	364	384
5	25	45	65	85	105	125	145	165	185	205	225	245	265	285	305	325	345	365	385
6	26	46	66	86	106	126	146	166	186	206	226	246	266	286	306	326	346	366	386
7	27	47	67	87	107	127	147	167	187	207	227	247	267	287	307	327	347	367	387
8	23	48	68	88	108	128	148	168	188	208	228	248	268	288	308	328	348	368	338
9	29	49	69	89	109	129	149	169	189	209	229	249	269	289	309	329	349	369	389
10	30	50	70	90	110	130	150	170	190	210	230	250	270	290	310	330	350	370	390
11	31	51	71	91	111	131	151	171	191	211	231	251	271	291	311	331	351	371	391
12	32	52	72	92	112	132	152	172	192	212	232	252	272	292	312	332	352	372	392
13	33	53	73	93	113	133	153	173	193	213	233	253	273	293	313	333	353	373	393
14	34	54	74	94	114	134	154	174	194	214	234	254	274	294	314	334	354	374	394
15	35	55	75	95	115	135	155	175	195	215	235	255	275	295	315	335	355	375	395
16	36	56	76	96	116	136	156	176	196	216	236	256	276	296	316	336	356	376	396
17	37	57	77	97	117	137	157	177	197	217	237	257	277	297	317	337	357	377	397
18	38	58	78	98	118	138	158	178	198	218	238	258	278	298	318	338	358	378	398
19	39	59	79	99	119	139	159	179	199	219	219	259	279	299	319	339	359	379	
20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360	380	

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15	35	55	75	95	115	135	155	175	195	215	235	255	275	295	315	335	355	375	395
16	36	56	76	96	116	136	156	176	196	216	236	256	276	296	316	336	356	376	396
17	37	57	77	97	117	137	157	177	197	217	237	257	277	297	317	337	357	377	397
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Pratt & Whitney
Presin Co.
Scherr Co. Inc.
Sheffield Gage
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Taft-Peirce Mfg. Co
Van Keuren Co.

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Donner Scientific
D & R Limited
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Armstrong Bros. Tool
Bergander Mfg. Co.
Brazilian Trading Co
Bristol Co.
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Cook Electric
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Eastern Specialty Co.
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Hartford Machine Screw
Hirschmann Co., Carl
Ideal Aerosmith
Insuline Corp
Kendrick & Davis Co.
Lynn, Robert M.
Morris Co., J. I.
National Spectrographic
PIC Design Corp.
Stevens Walden, Inc
Vaco Prods. Co.
Woodruff & Stokes

WRENCHES, Torque

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Richmont, Inc.
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Waters Mfg.

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GE, X-Ray Dept.
Hayes Scientific App
Hulcher Co., Charles
Jarrel-Ash Co.
Mitchell Radiation Prod.
North Amer. Philips Co
Picker X-Ray
RCA Div.
Scient. Inst. Dev. Lab.
Summers Gyroscope
Wyland, G. C.

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Aloe Co., A. S.
Andreasen, Inc., Holger
Applied Research Labs
Baird Assocs.-Atomic
Balteau X-Ray Dept.
Bar-Ray Products
Bendix, Friez Instr. Div
Campbell Electric
Del Electronics
Deltron, Inc.
Dice Co., J. W.
Eastman Kodak Co
Ercona Corp.
F. R. Machine Works
Fish-Schurman
GE, X-Ray Dept.
Hamner Electronics
Hayes Scientific App
Industrial X-Ray Labs
Isotope Products
Jarrell-Ash Co.
Jordan Regulator Co
Land-Air, Inc
Liebel-Flarsheim
Litton Ind. of Md.
Microtime Labs.
Mitchell Radiation Prods.
New Brunswick Scient.
North Amer. Philips Co
Patterson Screen Co.
Picker X-Ray Corp.
Scient. Inst. Dev. Lab.
Shallcross Mfg. Co.
Stoelting Co., C. H.
Tracerlab Inc.
Universal X-Ray Prod., Inc.
Westinghouse Electric
Westinghouse X-Ray Co.
Wyland, G. C.

X-RAY FLUOROSCOPIC SCREENS, see Screens, X-ray, Fluoroscopic

X-RAY INTENSIFYING SCREENS, see Screens X-ray Intensifying

X-RAY INTENSITY METERS

Anton Electronic Labs
Douglas Radio Labs
El-Tronics, Inc.
GE, X-Ray Dept.
Georator Corp.
Jordan Electronic Mfg. Co.
Landsverk Electrom.
Marconi Instruments Ltd
NRD Instrument
Nuclear-Chicago
Nuclear Electronics
Nucleonic Corp.
Ohmart Corp.
Radiation Counter Labs.
Radiation Inst. Dev. Lab.
Scient. Inst. Dev. Lab
Sensitive Research
Special Instruments Lab
Tracerlab Inc.
Victoreen Instruments
Western Radiation Lab.

X-RAY LEAD PLATE GLASS

Bache & Co., Semon

X-RAY MEASURING INSTRUMENTS

Andreasen, Inc., Holger
Anton Electronic Labs.
Applied Research Labs
Beckman, Inc., Arnold O
Beckman Instruments
Bristol Co.
Canadian Radium
Curtiss-Wright
Cyclotron Specialties
Douglas Instr. Labs.
Erie Instrumentation
F. R. Machine Works
GE, X-Ray Dept
Hamner Electronics
Herbach & Rademan
High Voltage Engg.
Hupp Electronics
Instrument Dev. Labs
Jarrell-Ash
Jordan Electronics
Landsverk Electrom.
Martin Hubbard Corp.
Mitchell Radiation Prods.
NRD Instument Co.
New Brunswick Scient. Co
Nuclear-Chicago
Nuclear Corp. of Amer.
Nuclear Electronics
Ohmart Corp.
Pratt & Whitney Co.
Radiation Counter Labs.
Radiation Inst. Dev. Lab.
Scient. Inst. Dev. Lab.
Sheffield Corp.
Standard Electric
Standard Piezo
Technical Associates
Tracerlab Inc.
Victoreen Instr. Co
Westinghouse X-Ray Co.

X-RAY SPECTROGRAPHS, see Spectrographs, X-Ray

X-RAY SPECTROMETERS, see Spectrometers, X-Ray

X-RAY STEREOSCOPES, see Stereoscopes, X-ray

X-RAY TUBES, see Tubes, X-ray

X-RAY VOLTMETERS, High Potential

Bradshaw Instruments
Calif. Computer Prods.
Davenport Mfg. Co.
GE, X-Ray Dept.
Hickok Electcl. Instr. Co.
Meters, Inc.
Precise Measmts.
Rawson Elec. Inst. Co.
Scient. Inst. Dev. Lab
Shallcross Mfg. Co
WacLine, Inc.

X-Y RECORDERS

Aero Electronics
Alden Electron & Impulse
Benson-Lehner Corp
Bristol Co.
California Computer Prods
Electro Insts., Inc.
Electronic Assocs.
Gilmore Industries
Hanson-Gorrill Brian
Leeds & Northrup
Librascope, Inc.
Mast Devel.
Moseley Co., F. L.
Phoenix Prec. Instr.
Royson Engrg. Co.
Schaevitz Engrg.
Tally Register
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Maintenance and Servicing of Electrical Instruments

by James Spencer. Useful to all instrument users, service men, switchboard attendants, testing engineers, and others, this book covers construction, testing, applications, principles of operation and maintenance of all kinds of electrical indicating instruments. Clothbound, 274 illustrations, 280 pages, 1951 (third edition), $2.00

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The Instruments Publishing Co., Inc.
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Chapter II. Availability and Selection
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Chapter IV. Radiation Protection
Chapter V. Reactor Control
Chapter VI. Instruments for Experiments
Chapter VII. Cost Study
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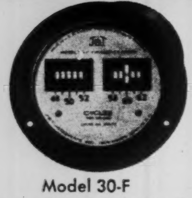
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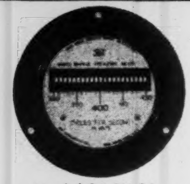
Dual Range, Double Window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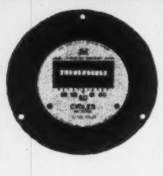
21-Reed Meter in 3½" Case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300—500 cycles and
380—420 cycles, 4" case.

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- ***Rugged Construction*** **of simplified, patented design, with no moving parts to wear out or get out of calibration.**
- ***Suitable for Electronic Circuits.*** **Power consumption is comparatively low, and J-B-T reeds have high Q with prompt, sharp response.**

3½", 2½" and 1½" SEALED Types

3½" FHXX Meters, sealed glass-to-metal construction with solder terminals, meet or exceed the sealing, mounting and electrical requirements of JAN-I-6 and MIL-M-6A, including the 3000 volt breakdown. Barrel diameter, 2¹¹⁄₁₆" —overall depth behind flange, 2⅞"... New 2½" Models 21-FHXX and 23-FHXX now are cataloged... The 1½" Sealed Size is illustrated by Model 15-FHAC, above, 60 and 400 cycles, 2 reeds, 8-10 volts, for cathode follower circuits as in standardizing output of audio oscillators... also 15-FH Series, 5 reed, 58-62 cycles, 100-130 volts, or 390-410 cycles, 110-130 volts. Barrel, 1½" dia., detachable flange, 2.094" dia., solder terminals.

REED RELAYS AND TACHOMETERS

Please give circuit requirements when requesting quotations on J-B-T *reed relays* and *oscillator controls:* (1) plug-in can type which responds to or controls respectively a transmitted signal such as 200 cycles in mobile or other communications equipment; (2) a new type relay, patent pending, which has no vibrating reed contacts, and often needs no further signal amplification. This device also will be made as a *frequency limit control* with reed indication.

For *tachometers* to read r.p.m. by resonance alone—no electrical or complicated mechanical connections—request Bulletin MT-458.

ASK FOR CATALOG 558

ELAPSED TIME METERS

For Maintenance, Tube Life and Operating or Test Time Records; Model 31-ES (illustrated) registers in ¹⁄₁₀ hours to 9,999.9 hours, then resets automatically. Most popular model 31-EX (3½" round) normally stocked for 60 cycles 100-130 volts; variations such as 50 cycle; 230 volts, 0-99999.0 hours; 3" rectangular case, and readings in minutes—available on special order.

SEALED ELAPSED TIME METERS

60 or 50 cycle, Model 31-EHXX, same as 31-EX above but fully sealed, with glass-to-metal construction, solder terminals, and 3½" detachable flange to match XX metal frequency meter case. 1000 volt break down—Model 21-EHXX, 2½" sealed 60 cycle meter has full size counter *400 cycle,* Model 33-EHXX, 110-125 volts, has same sealed construction, but 2¾" barrel dia., 4" deep behind panel.

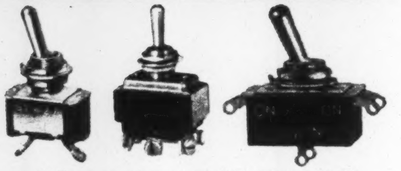
FREQUENCY—ELAPSED TIME METERS

One combination meter saves panel space and does the work of two. Model 31-FE (illustrated) has 3¼" flange, metal case 4¹⁹⁄₃₂" deep; 5 reeds, 58-62 cycles. On special order 7, 9, or 11 reeds, or 50 cycles, or 3½" case (known as 31-FEX-1) can be supplied.

DISTRIBUTOR SERVICE

Standard J-B-T items are available through authorized electronics parts distributors.

TOGGLE SWITCHES, AN, JAN, or MIL

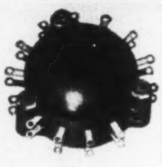


J-B-T now manufactures over 100 models of toggle switches, designed for exceptional reliability, as in JAN-S-23 and Ordnance Standards DDAX. Sand and dust seal AN types are supplied at additional cost for MIL-S-6745 Air Force or other requirements. More types are under development for MIL-S-3950. Improved enclosed designs are supplied on all models—there are no unused holes.

ST40, 42, 50, 52 series—Solid coin silver contacts and rocker arms, unique to J-B-T, add overload protection and keep contact resistance under .005 ohms. Nominal ratings 20 amp at 125 VAC, 10 amp, 250 VAC. See Bulletin TS-6.

ST12, 13, 16, 17, 22, 23, 26, 27 series—Nominally rated 6 amp at 125 VAC, 3 amp, 250 VAC; threaded bushings 29/64" or ¼" long. Current carrying parts heavily silver plated. Double-grip, self-cleaning contacts. See Bulletin TS-6.

ROTARY SWITCHES


MOLDED

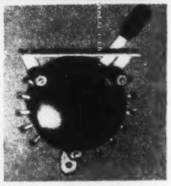
Shorting and Non-Shorting... 14 or 20 Positions ... 1 to 6 Decks (more on special order)... All moving contacts enclosed — eliminates dirt and corrosion... sturdy construction with 3-post deck suspension, double-grip collector arms, and rectangular drive shaft through decks for precision indexing... test results available covering certain procedures of MIL-E-5272 A... interchangeable, electrically and mechanically with J-B-T Series SS-14 and 20 position Laminated Switches.

Carrying capacity (not make-and-break): 1 amp.; maximum momentary, normal 5 amp.; maximum voltage between contacts and ground, 1000 volts R.M.S.; between decks and ground, 2000 volts R.M.S. Average contact resistance 0.007 ohms or less. Also available in 6-pole per deck double throw construction. Non-shorting (break before make) and shorting (make before break). Bonded construction is available on special order as MS-14B and MS-20B Types. Provides permanent moisture-proof bond between decks, and strong mechanical support for contacts.

LAMINATED

For dependable performance in quality test equipment, instruments, inspection setups and avionics — two compact types. 14 pos. (2" dia.) or 20 pos. (2²³⁄₃₂" dia.) one to six decks. Model SS-14-2 shown.

LEVER ACTION SWITCHES



Model MS-20-1L5A-1 (illustrated) provides 5 live positions, 2 circuits per deck in molded body. Mounting to Print SK-64. Single deck types use same top quality parts as laminated SS-14 switches. For ganged lever series, SSG types, in 3, 4, or 5 positions, 2-10 decks. See Print SK-74.

ASK FOR CATALOG 558

J-B-T INSTRUMENTS, INC. NEW HAVEN 8, CONN.

For more information circle 176 on inquiry card.

DESCRIPTIVE DIRECTORY

Of Manufacturers and Sole Representatives Selling Instruments and Devices Used for Measurement, Inspection, Testing and Automatic Control

Advertisers are indicated by bold-face type

A

A.R.F. Products Inc., 7627 Lake St., River Forest, Ill.
Electrical instrumentation, remote control equipment

A'G'A' Division, Elastic Stop Nut Corp., 1027 Newark Ave., Elizabeth 3, N. J.
Electro-mechanical time delay for a-c or d-c operation

Rep—W. Pa., Border Counties W. Va.
William E. Wargo Company
211 Yarrow Lane, Pittsburgh 36, Pa.
TUxedo 4-5800, 4-5801

A & M Tool & Die Co., Inc., Foster St., Southbridge, Mass.
Plastic molds, press dies, jigs, fixtures; special machinery; equipment components and assemblies

A-P Controls Corp., 2450 N. 32 St., Milwaukee 45, Wisc.
Automatic control systems; power units; valves

A-V Mfg. Corp., 730 Fifth Ave., New York 19, N. Y.
Magnetic tape and data recording instruments; data handling systems and readouts

ACF Electronics Div., ACF Industries, Inc., 800 N. Pitt St., Alexandria, Va.
Electrical and mechanical measuring instruments; gages; inspection devices

AMP, Inc., 21 Paxton St., Harrisburg, Pa.
Repair kits; connectors
(See advertisement on page 22, 23)

Abalon Precision Mfg. Corp., 540 Casanova St., New York 59, N. Y.
Instrument panels and chassis; screws; machine products

Abart Gear & Machine Co., 4820 W. 16th St., Chicago 50, Ill.
Custom cut gears; speed reducers

Abrams Instrument Corp., 606 Shiawassee St., Lansing 1, Mich.
Aerial cameras; stereoscopes; triangulators; mapping projectors; aerial surveying instruments; time and count devices
(See advertisement on page 70)

Accessory Products Corp., 616 Whittier Blvd., Whittier, Calif.
Pneumatic and fluid control devices, including valves, pressure regulators, filters and allied components

Accuracy, Inc., 4 Gordon St., Waltham 54, Mass.
Single-turn precision potentiometers, non-linear and custom designs

California
Samuel O. Jewett Co.
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STate 9-8103

Illinois
Rene Bluzat Co.
3045 N. Laramie Ave., Chicago 41
PEnsacola 6-2238-39-40-41

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Monahan & Co.
P. O. Box 474, Norwood, Mass.
NOrwood 7-5961

Missouri
John N. McCune Co.
P.O. Box 216, Florissant, Mo.
TEmple 7-3188

New York
Cooper-Simon & Co., Inc.
400 E. 79th St., New York 21
LEhigh 5-2900

Ohio
Callaghan Bach
2209 Losantiville Rd., Cincinnati 13
REdwood 1-8660

Washington
Freed H. Haight Co.
3212 Eastlake Ave., Seattle 2
EAst 1818

Accuracy Scientific Instrument Co., Inc., 2903 N. 12th St., Philadelphia 33, Pa.
Thermometers; hydrometers; thermo-hydrometers; thermo-regulators

Accurate Instrument Co., Inc., 3456 N. Clark St., Chicago 13, Ill.
Thermometers

Ace Electronics Associates, 99 Dover St., Somerville 44, Mass.
Sub-miniature potentiometers, potentiometer trimmers and relays

Ace Glass Inc., 1938 N.W. Blvd., Vineland, N. J.
Chemical and laboratory glassware

Ace Plastics Co., 91-58 Van Wyck Expressway Jamaica, L. I., N. Y.
Custom extrusion and fabrication of various plastic products

Acheson Colloids Co., 2180 Washington Ave., Port Huron, Mich.
Liquid and dry-film lubricants

Ackerman Engravers, 458 Broadway, New York 13, N. Y.
Edge-lighted panels

Ackerman-Gould Co., 92 Bleeker St., New York 12, N. Y.
High-speed marking machines
(See advertisement on page 116)

Acme Electric Corp., 2010 Water St., Cuba, N. Y.
Transformers; power supplies; voltage stabilizers

Acme Gauge & Instrument Co., Inc., 30 Main St., Brooklyn 1, N. Y.
Mechanical and thermal measuring and testing instruments

Acme Industrial Co., 200 N. Laflin St., Chicago 7, Ill.
Automatic assembly machines

Acme Regulator Co., Box 268, Tulsa 1, Okla.
High pressure regulators

Acme Scientific Co., 1450 W. Randolph St., Chicago 7, Ill.
Optical flats and light sources and scanners

Acme Wire Co., Dixwell Ave., New Haven 14, Conn.
Impregnating compounds; magnet wire; coil windings; varnishes and varnished insulations

Acoustica Associates, Inc., 26 Windsor Ave., Mineola, L. I., N. Y.
Ultrasonic cleaning units; ultrasonic soldering gun; liquid level sensors; cleaning systems for industry

Acragage Corp., see International Register, Instrument Div.

Acro Div., Robertshaw Fulton Controls Co., 2040 E. Main St. Columbus 16, Ohio
Precision snap action switches, temperature controls, and shaded pole motors

Acro Products Co., Inc., 369 Shurs Lane, Roxborough, Philadelphia 28, Pa.
Transformers

Acromage, Inc., 22519 Telegraph Rd., Detroit 41, Mich.
Magnetic amplifiers, frequency detectors, preamplifiers

Acromark Co., 3-11 Morrell St., Elizabeth 4, N. J.
Engraving, numbering and marking machines
(See advertisement on page 115)

Acton Labs., Inc., 533 Main St., Acton, Mass.
Instruments for measuring voltage phase angle and impedance; potentiometer test equipment; research and development; environmental testing facilities

Acushnet Process Co., Box 365 New Bedford Mass.
Precision molding of rubber, silicone and silicone resin by specification

Ad-Yu Electronics Lab., Inc., 249-259 Terhune Ave., Passaic, N. J. Electronic inst., phase meters, delay lines

Western Representative
Peninsula Associates
1345 Hancock St., Redwood City, Calif. EM-9-1226
3215 Western Ave., Seattle, Wash. AT-4-1840

Adage, Inc., 292 Main St., Cambridge, Mass. Data converters; chopper amplifiers

Adalet Mfg. Co., 14300 Lorain Ave., Cleveland 11, Ohio
Conduit and cable fittings; cable supports; vapor-tight lighting fixtures; weatherproof and explosion proof junction boxes and housings

Adams Co., Inc., R. P. 448 E. Park Dr., Buffalo 17, N. Y.
Aftercoolers, separators and filters for compressed air and gases; industrial water and chemical filters

Adams & Westlake, Relay Div., 1025 N. Michigan St., Elkhart, Ind.

Adde & Co., 57 Kennebec St., Portland 2, Maine
Counters; automatic preset count controllers

Adel Precision Products, Div. of General Metals Corp., 10777 Van Owen St., Burbank, Calif.
Hydraulic and pneumatic control equipment; heating, anti-icing, and fuel systems; engine accessories, line supports

Adler Electronics, Inc., 1 LeFevre Lane, New Rochelle, N. Y.
Low-power television and translator stations; magnetic amplifiers, and magnetic-amplifier-circuit components

Admittance-Namco Corp., Farmingdale, N. Y.

Advanced Electronics, Inc., 94 Silas Deane Hwy., Rocky Hill, Conn.
Electrical instruments and regulators; inspection devices

Advanced Insts., Inc., 45 Kenneth St., Newton Highlands 61, Mass.

Advanced Products Co., 59 Broadway, North Haven, Conn. Aviation instruments; clock works; hermetic seals; motors; mechanical seals; lead shields

Aemco Inc., 10 State St., Mankato, Minn.
Time Switches and interval timers
Relays; timers; time switches; sign flashers; sequence timers

Aeremac Associates, 50 S. San Gabriel Blvd., Pasadena 3, Calif.
Mechanical and optical instruments; oscilloscopes recording cameras

Aero Coupling Corp., Burbank, Calif.
Tubing; valves

Aero Electronics Co., 1512 N. Wells St., Chicago 10, Ill.
Design, development and construction of special purpose equipment, electrical, electro-mechanical and electro-optical

Aero Electronics Corp. (Calif.), 1657 W. 134th St., Gardena, Calif.
Miniature trimming potentiometers

Aero Instrument Co., 11423 Vanowen St., N. Hollywood, Calif.
Airborne and ground-station instruments

Aero Instrument Co., 5105 Denison Ave., Cleveland 2, Ohio
Airspeed tubes

Aero Research Instruments Co., Inc., 315 Aberdeen St., Chicago 7, Ill.
Designing, testing and fabrication of aerodynamic sensing probes; complete temperature sensing systems; ceramic insulated thermocouple wire and conductors

Chicago Representative
EPCO Services
116 S. Michigan Ave., Chicago 3, Ill.
STate 2-6486

Representative—Wash., Ore., Idaho, Mont.
Burt C. Porter Company
1209 Poplar Place, Seattle, Wash.
EAst 3-8330

Aero Supply Mfg. Co., Inc., P. O. Box 402, Corry, Pa.
Filters, strainers and valves for fuel systems

Aerolite Electronics Corp., 507-26th St., Union City, N. J.
Electro-mechanical components and assemblies, standard and custom-made

Aeronautical and Instruments Div., Robertshaw-Fulton Controls Co., 401 N. Manchester Ave., Anaheim, Calif.
Capacitive level instruments; vibraswitches; oxygen regulators

New York State Representative (excl. NYC)
Nickles Engineering Company
830 Linden Ave., Rochester 10, N. Y.
LUdlow 6-4988

Aerophysics Development Corp., P.O. Box 689, Santa Barbara, Calif.
Telemetering equipment, cable assemblies

Aeroquip Corp., 300 S. East Ave., Jackson, Mich.
Dynamic pressure gages; tubing; valves; flexible rubber hose and reusable fittings

Aeroquip (Marman Div.), 11214 Exposition Blvd., Los Angeles, Calif.

Aerosmith Instrument Co., see Ideal-Aerosmith

Aerotech Specialties Inc., Glastonbury, Conn.
Instruments for measuring velocity, direction, pressure and temperature of flowing gases

Aerotronic Associates, P.O. Box 419, Concord, N. H.
Electrical and optical testing instruments

Aerovox Corporation, Hi Q Division, Olean, N. Y.
Capacitors and resistors; test instruments

Aetna Scientific Co., Second & Spring Sts., Everett 49, Mass.
Water stills; sterilizers; autoclaves, and hospital equipment

Agfa Ansco, Binghamton, N. Y.
Electronic photometers

Aidlin Automation Inc., 1613 E. New York Ave., Brooklyn 12, N. Y.
Automatic circuit assembly machines, terminals; terminal boards; terminal strips

Ainslie Corp., 312 Quincy Ave., Quincy, Mass.
Microwave antennas and reflectors; aluminum and magnesium fabrication oscilloscopes and laboratory dollies

Ainsworth & Sons, Inc., Wm., 2151 Lawrence St., Denver 2, Colo.
Analytical, micro, assay, laboratory balances; classes M, S, and S-1 metric weights

Air Conditioning Equipment Co., 219 E. 44th St., New York 17, N. Y.
BTU meters; flow pickups

Air Instruments see Hill & Co., E. Vernon

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Sub-fractional horsepower motors, fans and blowers

Air-Maze Corp., 25000 Miles Road, Cleveland 28, Ohio
Filters for air and liquid

Air-O-Tronics, Box 31, Lancaster, Calif.
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Airborne Accessories Corp., 1414 Chestnut St., Hillside 5, N. Y.
Power units; aircraft control units; radio noise filters; airborne actuators

Airborne Instruments Laboratory, Inc., 310 Old Country Rd., Mineola, L. I., N. Y.
Polar and rectangular coordinate recorders, electronic instruments

Airbourne Instruments Laboratory, Inc., Modac Div., 864 Franklin Ave., Thornwood, N. Y.
Special purpose digital computer systems and component parts (magnetic drums, magnetic tape input-output units etc.)

Aircraft Armaments, Inc., Industry Lane, Cockeysville, Md.
Armaments systems; electronic, electro-mechanical, electro-explosive, and mechanical components, systems, and support, test equipment

Aircraft Electronics Associates, Inc., 94 Silas Deane Highway, Rocky Hill, Conn.
Aircraft instruments and testers

Aircraft Radio Corp., Boonton, N. J.
Aircraft and navigation instruments

Aircraft Transformer Corp., Willow & West Sts., Long Branch, N. J.
Pulse and high-frequency transformers

Airdesign Incorporated, 241 Fairchild Ave., Upper Darby, Pa.
Audio-frequency equipment; transformers

Airdraulics Engineering, Inc., Overhill Ave., Rye, N. Y.
Torque testers

AiResearch Mfg. Co., 9851 Sepulveda Blvd., Los Angeles 45, Calif.
Aircraft components, accessories and complete systems

Airflo Instrument Co., 53 Addison Rd., Glastonbury, Conn.
Special probes for measuring gas velocity, direction, temperature and pressure

Airflyte Electronics Co., 535 Ave. A, P.O. Box 207, Bayonne, N. J.
Collector ring assemblies; brush block assemblies; coded commutators

Airmatic Valve, Inc., 7317 Associate Ave., Cleveland 9, Ohio
Control valves and operating devices; hydraulic boosters

Airpath Instrument Co., Lambert Field, St. Louis 21, Mo.
Magnetic instruments; compasses

Airpax Products Co., Middle River, Baltimore 20, Md.
Power supplies; electrical and electronic components

Airplane & Marine Instruments Co., 15 William St., New York 5, N. Y.
Absolute pressure gages

Airtron, Inc., 1101 Elizabeth Ave., Linden, N. J.
Filters, modulators, cable assemblies, transformers

Alabama Automation Corp., 12th Floor, Times Bldg., Hurlsville, Alabama
Curve followers; multiple channel input function generators; process control systems

Aladdin Electronics, 705 Murfreesboro, Nashville 10, Tenn.
IF, RF and pulse transformers, inductors and chokes

Representative—Ohio, W. Va., W. Pa.
Sid Levin & Associates
6252 Mayfield Rd., Cleveland 24, Ohio
HIllcrest 2-8340

Albany Products Co., Inc., Connecticut Ave., South Norwalk, Conn.
Distributors of stainless steel fasteners, screws, bolts, set-screws and rivets

Alco Mfg. Co., 4011 Cuming St., Omaha 3, Neb.
Radioactivity instrumentation

Alco Valve Co., 865 Kingsland Ave., St. Louis 5, Mo.
Automatic controllers; control valves; pressure regulators

Alconox Inc., 853 Broadway, New York 3, N. Y.
Detergents

Alcor Electronics Corp., 180 Lafayette St., New York 13, N. Y.
Encapsulated circuits

Alden Electronic & Impulse Recording Equipment Co., Alden Research Center, P. O. Box 125, Westboro, Mass.
Electrosensitive paper; recorders; components

Alden Products Co., 126-D N. Main St., Brockton 64, Mass.
Mechanical components to mount, house, fasten, connect, and monitor electronic circuitry
(See advertisement on page 56)

Alden Systems Co., Washington St., Westboro, Mass.
Cabinets; racks; panels; lighting equipment; labaratory and work benches

Alfa American Corp., 303 W. 42 St., New York 36, N. Y.
Optical filters; production equipment; test instruments

Alfab Manufacturing Co., 8320 Millet St., Houston 12, Texas
Laboratory furniture

Alfax Paper & Engrg. Co., Washington St., Westboro, Mass.
Electrosensitive recording paper

Alfred Electronics, 897 Commercial St., Palo Alto, Calif.
Traveling-wave-tube amplifiers; precision regulated high-voltage power supplies; pulse generators; vacuum pump controls

Align-A-Scope, Inc., 2123 Stoner Ave., W. Los Angeles 25, Calif.
Optical tooling instruments

Alina Corp., 401 Broadway, New York 13, N. Y.
Clocks; differential pressure gages; time meters and switches; toolmakers' microscopes

All American Tool & Mfg. Co., 8027 Lawndale, Skokie, Ill.
Vibration fatigue testers

All Weather Springs, 56 Main St., Millburn, N. J.

Allard Instrument Corp., 146 E. 2nd St., Mineola, L. I., N. Y.
Aircraft instruments; power units; motors; switches; components

Allegany Instrument Co., 1091 Wills Mountain, Cumberland, Md.
Pressure recorders; amplifiers; cathode ray recorders; reflectometers; portable potentiometers

Chicago Representative
EPCO Services
116 S. Michigan Ave., Chicago 3, Ill.
STate 2-6486

Allegheny Ludlum Steel Corp., Oliver Bldg., Pittsburgh 22, Pa.
Stainless, tool and electrical steels, and alloys

Allegheny Plastics, Inc., Route #51 & Thorn Run Rd., Coraopolis, Pa.
Printed and laminated plastic dials, nameplates, etc.

Allen, Chas. I., Pequabuck, Conn.

Allen Co., Inc., L. B., 6710 Bryn Mawr Ave., Chicago 31, Ill.

Allen Co., A. K., 255 East 2nd St., Mineola, N. Y.
Cylinders; valves; rotary dial feed tables
(See advertisement on page 75)

Allen Mfg. Co., 133 Sheldon St., Hartford 2, Conn.
Hex-socket cap and set screws

Allen-Bradley Co., 136 W. Greenfield Ave., Milwaukee 4, Wisc.
Motor control; electronic components

Alliance Mfg. Co., Lake Park Blvd., Alliance, Ohio
Fractional-hp motors

Allied Chemical & Dye Corp., 40 Rector St., New York 6, N. Y.

Allied Control Co., Inc., 2 East End Ave., New York 21, N. Y.
Relays; switches; remote control equipment

Allied Engineering Div., Ferro Corp., 4150 East 56th St., Cleveland, Ohio

Allied Engraving & Stamping Co., 17-21 Elm St., Buffalo 3, N. Y.
Precision stamped and/or engraved products

Allied Industries, Inc., P.O. Box 119, Ogallala, Nebr.
Coaxial cable connectors

Allied Products Div., Hamilton Watch Co., 940 Wheatland Ave., Lancaster, Pa.

Allied Radio Corp., 100 N. Western Ave., Chicago 80, Ill.
Distributors of electronic tubes, parts and equipment P. A. amplifiers, high fidelity wired amplifiers and tuners; electronics kits

Allis-Chalmers Mfg. Co., P. O. Box 512, Milwaukee 1, Wisc.
Position indicators; frequency load and phase regulators

Allison Labs., 14185 Skyline Drive, LaPuenta, Calif.

Alloy Bellows Engineering Co., 18125 Roseland Rd., Cleveland 12, Ohio
Bellows, pressure and vacuum controllers

All-Tronics, Inc., 45 Bond St., Westbury, L. I., N. Y.
Special electromechanical systems, networks, test equipment; R. F. filters.

Almo Mfg. Co., 113-119 Sussex Ave., Newark 3, N. J.
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Standard and custom built glass enclosed mercury switches

Alpha Corp., 65 Harvard Ave., Stamford, Conn.
Instrument lubricating oils and oil testers

Alpha Metals, Inc., 56 Water St., Jersey City 4, N. J.
Solder, tin, and lead specialties; fluxes, high purity metals; fabrication of non-ferrous metals

Alpha Molkote Corp., 65 Harvard Ave., Stanford, Conn.
Lubricants

Alpine Laboratories Limited, 1610 S. Nevada Ave., Colorado Springs, Colo.
Radiation Detection Instruments & Ultra-Violet Light Sources

Altec Lansing Corp., 1515 South Manchester Ave., Anaheim, Calif.
Audio equipment

Alteneder & Sons, Theo., 1217 Spring Garden St., Philadelphia 23, Pa.
Drawing instruments
(See advertisement on page 83)

Alto Scientific Co., 855 Commercial St., Palo Alto, Calif.
Electrical test instruments

Aluminum Co. of America, 1123 Alcoa Bldg., Pgh. 19, Pa.
Flux; forgings; magnesium; powdered metal; aluminum foil; hard solders; aluminum wire.

Aiwac Corp., 13040 Cerise St., Hawthorne, Calif.

Amelco, Inc., 2040 Colorado Ave., Santa Monica, Calif.
Electronic research and development; electronic assembly fabrication; electronic test equipment; defense industry major sub-contractors

Amco Engineering Co., 7333 W. Ainslie St., Dept. M. Chicago 31, Ill.
Modular enclosures, blowers, chassis slides, small instrument cabinets
(See advertisement on page 50)

Amerac Incorporated, Dunham Road, Beverly, Mass.
Electrical and electronic instruments

American Balance Corp., 48 Potter Ave., New Rochelle, N. Y.
Balances, scales and weights

American Brass Co., Waterbury 20, Conn.

American British Electric Corp., 57 Park Ave., New York 16, N. Y.
Voltage-dividing resistors

American Chain & Cable Co., Inc., Automotive & Aircraft Div., 601 Stephenson Bldg., Detroit, Mich.
Flexible control cable
(See advertisement on page 145)

American Chain & Cable Co., Helicoid Gage Div., 929 Connecticut Ave., Bridgeport 2, Conn.
Bourdon tube gages and pressure indicators

American Condenser Co., 4410 N. Ravenwood Ave., Chicago 40, Ill.
Capacitors

American Cystoscope Makers, Inc., 1241 Lafayette Ave., New York 59, N. Y.
Bore and internal surface inspection devices

American Electric Motors, Inc., see American Electronics, Inc.

American Electroneering Corp., 2040 Colorado Ave., Santa Monica, Calif.
Electronic instruments

American Electronic Labs., Inc., 121 North Seventh St., Philadelphia 6, Pa.
Electrical and electronic instruments; photoelectric instruments; antenna design; radar test equipment; medical instruments

American Electronic Products Co., Inc. Flex O Block Div., 202 W. 40 St., New York 18, N. Y.
Terminal blocks
Representative (N. Y. Metro. Area)
Ben Joseph Associates
13 S. Middle Neck Rd., Great Neck, N. Y.
Hunter 7-9595 or Murray Hill 2-0815

American Electronics, Inc., 655 W. Washington Blvd., Los Angeles 15, Calif.
Ac-dc miniature motors and blowers; motor alternators, induction couplings; servo components; magnetic recorders; nuclear instruments

American Elite, Inc., 29 East 32nd St., New York 16, N. Y.
Antennas; connectors; cathode-ray and electron tubes; electronic components

American Emblem Co., Inc., P. O. Box 116, Utica 1, N. Y.
Dies and tools; contract manufacturers of badges, emblems, names plates, and escutcheons

American Felt Co., Glenville, Conn.

American Forest Products Co., 30 & Thompson Sts., Philadelphia 21, Pa.

American Gage & Machine, see Simpson Electric Div.

American Gas & Chemicals, Inc., 120 E. End Ave., New York 28, N. Y.
Leak detecting liquid

American Gas Accumulator Co., see A'G'A' Div. Elastic Stop Nut Corp.

American Gas Furnace Co., 988 Lafayette St., Elizabeth 4, N. J.
Gas fired furnaces and burners, glass working eqpmt.

American Hard Rubber Co., 93 Worth St., New York 13, N. Y.

American Hydromath Corp., 25-20 43rd Ave., Long Island City 1, N. Y.
Nautical instruments; quality control instruments; slide rules

American Indicator-Paper Co., 4611 N. Kostner Ave., Chicago 30, Ill.
Chemical indicator papers

American Industrial Electronics, P. O. Box 14105, Houston 21, Texas
Instrument chassis; converters; power supplies; prototypes; custom fabrication

American Industrial Instrument Co., 46 Florence St., Springfield 5, Mass.
Automatic assembly machines (custom)

American Instrument Co., 8010-8020 Georgia Ave., Silver Spring, Md.
Scientific instruments and materials testing apparatus, ovens, fittings, reactors

American Kloeckner-Moeller Corp., 4113 E. 11th St., Tulsa 12, Okla.
Electric motor controls, contactors, relays, motor starters; control cabinets; pilot devices; drum switches and limit switches

American Laubscher Corp., 250 West 57th St., Fisk Bldg., New York 19, N. Y.
Screw machine products; instrument jewels; hairsprings; centerless ground and polished products; stampings and dies; pinions; gears; wheels; dials; panels; scales
(See advertisement on page 174)

American Lava Corp., Cherokee Blvd. & Manufacturers Rd., Chattanooga 5, Tenn.

American Lens Co., 45 Lispenard St., New York, N. Y.
Cathode-ray tubes and lenses

American Machine & Foundry Co., 1101 N. Royal St., Alexandria, Va.
Electronic and electromechanical equipment; automatic machinery; electric power generation instruments

American Machine & Foundry Co., Electronics Div., 1085 Commonwealth Ave., Boston, Mass.
Electrical and electronic instruments and components; medical and biological instruments

American Machine & Metals Inc.
(See U. S. Gauge; Riehle Testing Machines, Gotham Instruments)

American Measurement & Control, Inc., 240 Calvary St., Waltham 54, Mass.
Coil winding, servo amplifiers, phase shifters, torque motors, flow transducers, servo valves

American Measuring Instruments Corp., 21-25 4th Ave., Long Island City 1, N. Y.
Precision measuring instruments

American Mercantile Co., Inc., 33 W. 42nd St., New York 18, N. Y.

American Meter Co., 13500 Philmont Ave., Philadelphia 16, Pa.
Instruments and control equipment for gas and oil industries, regulators, orifice meters, gas meters; telemetering systems

Albany Representative
96 South Swan Street
Albany, N. Y.
Albany 4-9760

Atlanta Representative
3084 Grandview Avenue North East
Atlanta 5, Ga.
Cedar 3-4527

Birmingham Representative
1511 Brown-Marx Building
Birmingham 3, Ala.
Alpine 1-8361

Boston Representative
455 Commercial Street
Boston 13, Mass.
Capitol 7-8935

Chicago Representative
122 South Michigan Avenue
Chicago 3, Ill.
Harrison 7-2862

Fullerton, California Representative
300 North Gilbert Avenue
Fullerton, Calif.
Lambert 5-8237

Garland, Texas Representative
4400 Forest Lane
Garland, Texas
Broadway 6-6134

Houston Representative
667 San Jacinto Building
Houston 2, Texas
Capitol 2-9051

New York Representative
60 East 42nd Street
New York 17, N. Y.
Murray Hill 7-6980

Pittsburgh Representative
733 Washington Road
Pittsburgh 28, Penna.
Lehigh 1-2822

San Francisco Representative
206 World Trade Center
San Francisco 11, Calif.
Garfield 1-5975

Tulsa Representative
709 Kennedy Building
Tulsa 1, Oklahoma
Luther 3-5163

American Metrix Corp., 40 Hadden Ave., Camden 3, N. J.

American-Monarch Corp., Amer. Electronics Div., 2801-37th Ave., N.E., Minneapolis, Minn.
Potted circuits, amplifiers, dc-ac magnetic converters, relays, power supplies, control and alarm systems, bandfilters, brakes

American Name Plate & Mfg. Co., see Anco Instr. Div.

American Optical Co., Instrument Div., Box A, Buffalo 15, N. Y. (Projectors Div., 80 Heard St., Chelsea, Mass.)
Scientific optical instruments; projection apparatus; testing equipment; microscopes, microtomes, refractometers, spectrometers, visual colorimeters, illuminators, delineascopes, magnifiers; special lenses, prisms and mirrors.

American Paulin System, 1524 So. Flower St., Los Angeles 15, Calif.
Meterological instruments; altimeters; barometers

American Photocopy Equipment Co., 2100 W. Dempster St., Evanston, Ill.
Photocopy equipment

American Platinum Works, 231 N. J. Railroad Ave., Newark, N. J.

American Recording Chart Co., 3113 E. 11th St., Los Angeles 23, Calif.

American Research Corp., Route #6 Farmington, Conn.
Testers for environment conditions, product properties, etc; instrument calibrating
(See advertisement on page 88)

American Resin Corp., 3215 N. Sheffield Ave., Chicago 13, Ill.

American Silver Co., 36-07 Prince St., Flushing 54, N. Y.
Silver solders; solder flushed metals, contacts, clad-metals

American Super-Temperature Wires Inc., West Canal St., Winooski, Vt.
Cable, wire, tape, tubing
(See advertisement on page 224)

American Television & Radio Co., 300 E. Fourth St., St. Paul 1, Minn.

American Thermo-Electric Co., 1023 N. Fuller Ave., Los Angeles 46, Calif.
Vacuum, separate-heater, and contact type thermocouples
(See advertisement on page 197)

American-Thermo Ware Co., 12-16 Warren St., New York 7, N. Y.

American Time Products, Inc., 580 Fifth Ave., New York 36, N. Y.
Timing systems; frequency standards
(See advertisement on page 182)

American Tradair Corp., 34-01 30 St., Long Island City 6, N. Y.
Electronic instruments and components; radioactivity counters, shields, etc.
(See advertisement on page 159)

Amerline, 2727 W. Chicago Ave., Chicago 22, Ill.
Radio tube testers; spark plug testers

Amersil Co., Inc., 685 Ramsey Ave., Hillside 5, N. J.
Fused silica and quartz products

Ames Co., B. C., 131 Lexington St., Waltham, Mass.
Comparator and dial gages; length measuring devices

Ames Precision Machine Works, 131 Lexington St., Waltham 54, Mass.
Instrument lathes; hardness testers

Amglo Corp., 4325-33 Ravenswood, Chicago 13, Ill.
Gas discharge tubes for signals, controls, stroboscopic and photographic uses; dc timer motors and timers; electronic flash units; special electron tubes
(See advertisement on page 201)

Ampco Mfg. Co., 9 River St., Morristown, N. J.
Connectors, cable assemblies, fittings, terminals

Amperex Electronic Corp., 230 Duffy Ave., Hicksville, L. I., N. Y.
Electron tubes, X-ray tubes, crystal diodes, transistors
Representative—Ohio, W. Va., W. Pa.
Sid Levin & Associates
6252 Mayfield Rd., Cleveland 24, Ohio
HIllcrest 2-8340

Amperite Co., Inc., 561 Broadway, New York 12, N. Y.
Delay relays; ballast regulators
(See advertisement on page 75)

Ampex Corp., 934 Charter St., Redwood City, Calif.
Magnetic tape recorders

Amphenol Electronics Corp., 1830 S. 54th Ave., Chicago 50, Ill.
Electrical rack and panel connectors; Teflon and polyethylene Coaxial cable plugs and sockets; cable and wire assemblies
(See advertisement on page 16)
Authorized Distributor
Pioneer Electronic Supply Corp.
2115 Prospect Ave., Cleveland 15, Ohio
SUperior 1-9410

Amplifier Corp. of America, 398 Broadway, New York 13, N. Y.
Amplifiers; magnetic tape recorders

Balancing & Magnetic Equipment
Annis DYNOGRAPH BALANCING MACHINES Hi-Flux MAGNETIZERS & DEMAGNETIZERS

R. B. ANNIS COMPANY

Indianapolis 2, Ind.

For more information circle **245** on inquiry card.

Amthor Testing Instrument Co., Inc., 48 Van Sinderen Ave., Brooklyn 7, N. Y.
Physical testing machines; speed indicators; indicating, recording, hand tachometers; thickness gages; mercury columns; scales: paper, cordage, foil
(See advertisement on page 149)

Anaconda Wire & Cable Co., 25 Broadway, New York 4, N. Y.

Analogue Controls, Inc., 39 Roselle St., Mineola, L. I., N. Y.
Precision potentiometers

Analysis Sales Co., 1827 Union Commerce Bldg., Cleveland 14, Ohio
Impact recorders

Analytic Systems Co., 980 North Fair Oaks Ave., Pasadena, Calif.
Continuous process stream analyzers; complete analysis systems; accessories and sampling systems.

Analytical Measurements, Inc., 585 Main St., Catham, N. J.
pH probes and meters

Anco Instr. Div., Amer. Name Plate & Mfg. Co., 4254 W. Arthington St.; Chicago 24, Ill.
Electronic instruments; industrial stethoscopes

Anders Lykens Corp., See Milton Roy Co., Penna

Andersen Laboratories, Inc., 501 New Park Ave., W. Hartford 10, Conn.
Fixed and variable solid delay lines
(See advertisement on page 76)

Anderson Machine Shops, Inc., Brook Rd., Needham Heights 94, Mass.
Testing machines; yarn testers; computers

Anderson Co., V. D., 1935 W. 96th St., Cleveland 2, Ohio
Air cleaners, scrubbers and strainers, steam traps

Anderson & Sons, Inc., Westfield, Mass.
Nameplates, dials, rules, gauges, tamper-proof badges

ANelex Corp., 150 Causeway St., Boston 14, Mass.
High-speed data printing systems

Anemostat Corp. of America, 10 E. 39th St., New York 16, N. Y.
Airspeed indicators; thermometers; static pressure indicators

Anetsberger Bros., Inc., Northbrook, Ill.
Temperature and humidity test chambers

Ann Arbor Instrument Works, 725 Packard St., Ann Arbor, Mich.
Testing machines

Ann Arbor Optical Co., P. O. Box 2056, Ann Arbor, Mich.
Optical test instruments

Annin Company, 1040 S. Vail Ave., Los Angeles 22, Calif.
Control valves
Rep—Lower Wis., No. Ill., No. Ind.
Paul B. Shannon Co.
10336 S. Western Ave., Chicago 43, Ill.
BEverly 3-3392

Annis Company, R. B., 1101 N. Delaware St., Indianapolis 2, Ind.
Precision dynamic and single plane balancing machines; magnetizing and demagnetizing equipment; split core current transformers
(See advertisement on page 230)

Anti-Corrosive Metal Products Co., Inc., S. River St., Castleton-on-Hudson, N. Y.
Stainless steel and nylon fastenings

Anton Electronic Labs., Inc., 1226 Flushing Ave., Brooklyn 37, N. Y.
Electrical, electronic and nucleonic instruments; electron tubes; cable assemblies, chassis, connectors

Apex Scientific Co., 59 Donna Maria Way, Orinda, Calif.

Apex Specialties Co., 1115 Douglas Ave., Providence 4, R. I.
Magnifiers; lens fitting heaters and cones

Applied Dynamics Corp., 32 N. Main St., Natick, Mass.
Pumps, low-pressure air, centrifugal, and positive displacement; dehydrators.

Applied Physics Corp., 2724 S. Peck Rd., Monrovia, Calif.
Cary recording quartz spectrophotometers; vibrating reed electrometers

Applied Radiation Corp., 2404 North Main St., Walnut Creek, Calif.
Traveling-wave linear electron accelerators, high voltage power supplies to 20 kilovolts, 250 kilowatts, energy analyzers

Applied Research Labs Inc., P. O. Box 1710, Glendale 5, Calif.
Spectrochemical equipment, including grating spectrographs; optical emission quantometers; X-ray fluorescence spectrometers and quantometers; source units; microphotometers; related accessories

Applied Science Corp. of Princeton, P. O. Box 44, Princeton, N. J.
Development and production of telemetering systems and components and supervisory control systems
(See advertisement on page 76)

Aqua Survey & Instrument Co., 2518 Leslie Ave., Cincinnati 12, Ohio
Pipe locators

Arachne Laboratory, P. O. Box 1606, Huntington, W. Va.
Laboratory supply house

Arenberg Ultrasonic Lab., 94 Green St., Jamaica Plain 30, Boston, Mass.
Amplifiers, attenuators, ultrasonic delay lines, flaw detectors, cleaners
(See advertisement on page 78)

Arens Controls, Inc., 2017 Greenleaf St., Evanston, Ill.
Remote control systems

Arga Div., see Helipot

Aristo Grid Lamp Products, Inc., 65 Harbor Rd., Port Washington, L. I., N. Y.
Visible spectrum and ultraviolet lamps
(See advertisement on page 114)

Aristo Import Co., Inc., 630 Fifth Ave., New York 20, N. Y.
Stop watches

Arizona Tool & Die Co., 31 E. Rillito St., Tucson, Ariz.
Gages; micrometers; optical comparators; shop equipment

Ark Engineering Co., 431 W. Tabor Rd., Philadelphia 20, Pa.
Electrical measuring and testing equipment

ARK-LES Switch Corp., 51 Water St., Watertown 72, Mass.
Terminals, terminal boards, terminal strips

Arlin Products, Inc., 13541 Auburn Ave., Detroit 23, Mich.
Electronic inspection equipment; gage heads; micrometers; automatic control systems

Arma Div., Am. Bosch Arma Corp., Roosevelt Field, Garden City, N. Y.
Servomechanisms; computers; gyroscopes; navigation, guidance and fire control systems

Arnel Electronics, Inc., 840 Fifth Ave., Brooklyn 32, N. Y.
Terminals; terminal strips, blocks; sockets; connectors; related components

Armour & Co., Curled Hair Dept. & Coated Abrasives Div., North Benton Rd., Alliance, Ohio
Packaging materials; sand paper

Armstrong Bros. Tool Co., 5200 Armstrong Ave., Chicago 30, Ill.

Arnhold Ceramics, Inc., 1 East 57th St., New York 22, N. Y.
Electrical and electronic components

Arnold Engineering Co., P. O. Box G, Marengo, Ill.
Permanent magnets; magnetic materials

Arnold Magnetics Co., 4613-15 W. Jefferson Blvd., Los Angeles 16, Calif.
Magnetic amplifiers; HI-Q filters; toroidal coil winding equipment

Arnoux Corp., 11924 W. Washington Blvd., Los Angeles 66, Calif.
Developement and manufacture of airborne and industrial instrumentation equipment including: temperature and pressure control systems; magnetic amplifiers; temperature transducers, data handling systems
(See advertisement on page 34)

Aronson Machine Co., Arcade, N. Y.

Arrow-Hart & Hegeman Electric Co., 103 Hawthorne St., Hartford 6, Conn.
Magnetic, mercury & relay switches

Art Wire & Stamping Co., 1 Boyden Place, Newark 2, N. J.
Precision wire forms

Artisan Metal Products, Inc., 63 Pond St., Waltham 54, Mass.
Autoclaves, cabinets, microwave eqpmt., vacuum eqpmt., custom process eqpmt.

Artisan Metal Works Co., 11400 Madison Ave., Cleveland 2, Ohio
Instrument chassis, racks and cabinets

Asam Mfg. Co., 1629 W. Fort St., Detroit 16, Mich.

Asch Equipment Co., 642 Keowee St., Dayton 4, Ohio
Force measuring equipment

Ashland Electric Products Co., 32-02 Queens Blvd., Long Island City 1, N. Y.
Special electric motors

Ashton Valve Company, 43 Kendrick St., Wrentham, Mass.
Pop safety & relief valves; pressure gages; gage testers and master-pilot and master pressure gages

Askania Regulator Co., See GPE Controls, Inc.

Askania-Werke, A. G., 4913 Cordell Ave., Bethesda, Md.

Assembly Products, Inc., 75 Wilson Mills Rd., Chesterland 11, Ohio
Electrical and electronic instruments; and accessories, galvanometers, A-to-D converter meter
(See advertisement on page 165)

Associated Engineering Corp., 65 Kent St., Brookline 46, Mass.
Patch cords, d c power supplies

Associated Research, Inc., 3777 W. Belmont Ave., Chicago 18, Ill.
Vibrotest insulation testing equipment. Special measuring and testing instruments of electrical nature.
Representative—SE N. Y., No. N. J., SW Conn
Kahant Associates
11 Park Place, New York 7, N. Y.
Cortlandt 7-5326

Associated Specialties Co., 1751 Main St., Orefield, Pa.
Electronically regulated constant voltage and constant-current power supplies
(See advertisement on page 140)

Associated Spring Corp., Bristol, Conn.
Springs, clips, fasteners

Associated Testing Labs., Inc., Div., 117 Clinton Rd., Caldwell, N. J.
Environmental testing; test chambers and machines

Associated Valve & Engr. Co., 1150 W. Marquette Road, Chicago 21, Ill.
Automatic controllers; control valves; components

Astra Technical Instrument Corp., 1132 Mission St., South Pasadena, Calif.
Temperature control systems

Astron Corp., 255 Grant Ave., E. Newark, N. J.
Capacitors, filters

Atchley, Inc., Raymond, 2340 Sawtelle Blvd., Los Angeles 64, Calif.
Electro-hydraulic control systems; hydraulic servovalves; torque motors; transistorized electronic servo amplifiers; dc electronic power supplies

Atkomatic Valve Co., Inc., 545 W. Abbott St., Indianapolis 25, Ind.
Two-way Solenoid valves

Atlantic India Rubber Works, Inc., 571 W. Polk St., Chicago 7, Ill.

Atlantic Research Corp., 812 Fairfax St., Alexandria, Va.
Pressure, vibration, and acoustic pickups

Atlantic Research Corp., Optical Group, 901 N. Columbus St., Alexandria, Va.
Precision optical equipment

Atlantic Transformer Co., 30 Hynes Ave., Groton, Conn.
Transformers

Atlas E-E Corporation, 47 Prospect St., Woburn, Mass.
Electronic component clips, special packaging

Atlas Electric Devices Co., 4114 N. Ravenswood Ave., Chicago 13, Ill.
Machines to determine a material's resistance to the action of sunlight, sunlight and rain, and laundering

Atlas Engineering Co., 176 Blue Hill Ave., Roxbury, Mass.
Power supplies; amplifiers; electronic components

Atlas Exploration Co., 1911 W. Alabama St., Houston 6, Texas
Geophysical instruments

Atlas Precision Products Co., Philadelphia 24, Pa.

Atlas Valve Co., 282 South St., Newark 5, N. J.
Regulator valves

Atmosphere Control Co., Inc., 5315 Chester Ave., Philadelphia 43, Pa.
Testing instruments and machines; gas anlyzers

Atocon Corp., 527 N. Union St., Galion, Ohio
Key switches; switchboard lamp extractors; lamps

Atomic Instrument Co., see Baird-Atomic

Atwood & Morrill Co., Salem, Mass.
Automatic control systems; control valves

Auburn Button Works, Inc., 1930 Canova Ave., Auburn, N. Y.

Auburn Mfg. Co., 10 Stack St., Middletown, Conn.
Gaskets; washers; packings

Audio Development Co., Transformer Div. 2833 13th Ave., S., Minneapolis 7, Minn.
Transformers; audio frequency equipment

Audio Devices, Inc. 444 Madison Ave. New York 22, N. Y.
Magnetic recording tape and film, instantaneous recording discs, recording styli, silicon rectifiers

Representative—Wash., Ore., Idaho, Mont.
Burt C. Porter Company
1209 Poplar Place, Seattle, Wash.
EAst 3-8330

Audio Instrument Co., Inc., 133 W. 14th St., New York 11, N. Y.
Audio frequency equipment

Auerbach Electronics Corp. 109 N. Essex Ave., Narberth, Penna.
Computers, data converters, counters, telemetering equipment

Austin Company, Special Devices Div., 76 Ninth Ave., New York 11, N. Y.
Beta-gamma hand and foot checkers; computers and components; electrical and electronic; measuring instruments and automatic-control systems; components

Auth Electrical Specialty Co., Inc., 422 E. 53 St., New York 22, N. Y.
Signaling devices

Auto Control Laboratories 333 S. Hindry Ave. Inglewood 4, Calif.
Hydraulic servo-valves, hydraulic and pneumatic test equipment, ovens

Auto Engraver Co., Ridgefield, Conn.
Contour and 3-dimensional milling machines

Autocall Co., Shelby, Ohio
Electrical signaling, control & metering devices

Autoclave Engineers, Inc., 2930 W. 22nd St., Erie, Pa.
High pressure autoclaves, valves, thermocouples, fittings, precision tubing, reactors

Automatic & Precision Mfg. Co., 252 Hawthorne Ave., Yonkers 5, N. Y.
High-pressure seals for switches and shafts; high-pressure, self-sealing screws

Automatic Control Co., 995 University Ave., St. Paul 4, Minn.
Control systems, telemetering eqpmt

Automatic Controls Corp., 2390 Winewood, Ann Arbor, Mich.

Automatic Development Co., 2530 N. Naomi St., Burbank, Calif.
Motor testing equipment
(See advertisement on page 57)

Automatic Electric Sales Corp., Wolf Rd. at Armitage, North Lake, Ill.
Relays; rotary stepping switches, and other control components; P-A-X business telephone systems
(See advertisement on page 17)

Automatic Methods, Inc., 965 W. Grand St., Elizabeth, N. J.

Automatic Scale Co., Inc. 180 Lafayette St., New York 14, N. Y.
Automatic Scales

Automatic Steam Products Corp., 140 W. 31st St., New York, N. Y.
Water demineralizers; steam generators

Automatic Switch Co., Hanover Rd., Florham Park, N. J.
Solenoid valves and automatic electric control apparatus
Representative—Western Pa., W. Va.
Continental Sales & Engineering Co.
211 Nelbon Ave., Pittsburgh 35, Pa.
Churchill 1-5660

Automatic Timing & Controls, Inc., King of Prussia, Penna.
Timers, time control and specialty engineering; valves and valve controllers; relays.
(See advertisement on pages 65, 82, 155, 200)

Automatic Valve Controller Co., Box 268, Tulsa 1, Okla.
Automatic valve control

Automation, Inc., 212 Worcester St., Wellesley Hills 82, Mass.
Electrical, electronic, electromechanical control systems, magnetic memories; holiday detectors; sorting equipment

Automation Controls Corp., 5737 West 98 St., Los Angeles 45, Calif.
Relays, military & telephone type

Automation Corp. of America, 5546 Satsuma Ave., North Hollywood, Calif.
General purpose control systems for automatic operation of machine tools; magnetic recording equipment telemetering eqpmt.

Automation Equipment, Inc., 428 S. Cherry St., Wallingford, Conn.

Automation Gages, Inc., 100 Seneca Ave., Rochester 21, N. Y.
Dimensional gages, sorters

Automation Products, Inc., 3030 Maxroy St., Houston, 24, Texas
Electrical and electronic controls; electrical and pneumatic operated valves, level, viscosity, and specific gravity transmitters

Autonetics Div., North American Aviation, Inc., 9150 E. Imperial Hwy, Downey, Calif.

Autoscrew Co., 216 W. 18th St., New York 11, N. Y.
Instrument Screws

Autotron Co., 3629 N. Vermilion St., Danville, Ill.
Photoelectric control and inspection devices
Representative
John T. Fuhrman, Jr.
6822 Thomas Blvd., Pittsburgh 8, Pa.
MOntrose 1-3838

Autron Engineering, Inc., see Telecomputing Corp.

Aviation Engineering Corp., 54-56 58th St., Woodside, N. Y.
Industrial measuring and automatic-control devices; remote-control systems; testers; electrical and electronic instruments and components, regulators; computer components

Avien, Inc., 58-15 Northern Blvd., Woodside 77, N. Y.
Aircraft instruments; systems and system components for fuel gaging and fuel management, engine temperature and fuel flow instrumentation

Avion Div., ACF Industries, Inc., 11 Park Place, Paramus, N. J.
Electrical and mechanical measuring instruments and automatic control systems, data converters, telemetering eqpmt., motor controllers

Avionic Products Engr. Corp., Route No. 46, Dover, N. J.
Aircraft measuring and automatic control instrumentation

Avionic Supply, 5790 Washington Blvd., Culver City, Calif.
Distributors of new and used instruments and control equipment

Axel Brothers, Inc., 134-20 Jamaica 18, N. Y.
Filters, resistors, capacitors

Axler Associates, Inc., 102-42 43rd Ave., Corona 68, N. Y.
Process control systems; optical analyzers, infrared detectors; mirrors
(See advertisement on page 179)

B

B & F Instruments, Inc., 3644 N. Lawrence St., Philadelphia 40, Pa.
Torque and acceleration measuring equipment; bridge-balance and calibrating units

B & H Instrument Co., Inc., 3479 W. Vickery Blvd., Fort Worth 7, Texas
Jet engine thermocouple system testers; thermal switch testers; tachometers, frequency systems testers

B-I-F Industries, Inc., 422 Harris Ave., Providence 1, R. I.
Equipment for control and processing of solids, liquids and gases, telemetering equipment

B J Electronics, Borg-Warner Corp., 3300 Newport Blvd., P. O. Box 1679, Santa Ana, Calif.
Environmental testing, digital systems & components, RF test equipment, nuclear instrumentation

B & K Manufacturing Co., 3726 N. Southport Ave., Chicago 13, Ill.
Test equipment calibrators; video pattern and picture generators; shorted turns indicators; electron tube testers; CRT testers; and rejuvenators

B W Controller Corp., 2200 E. Maple Rd., Birmingham, Mich.
Floatless liquid level controls; process control systems

Babcock Relays, Inc., Box 344, Costa Mesa, Calif.
Subminiature, sensitive, and polarized relays

Bacharach Industrial Instrument Co., 7301 Penn Ave., Pittsburgh 8, Pa.
Portable CO_2 and oxygen indicators; CO detectors; portable indicating and recording thermometers; relative humidity indicators; smoke testers; air filter gages; electrical operation recorders
(See advertisement on page 192)

Bache & Company, Semon, Greenwich & Morton Sts., New York 14, N. Y.
Mirrors, plate glass, sheet glass, satin ground glass, glass specialties, gage glass tube, optical parts
(See advertisement on page 104)

Bachmann Co., Inc., Eric R., 27-11 41st Ave., Long Island City 1, N. Y.
Metalworking machine tools & precision tools

Bacon Industries, Inc., 192 Pleasant St., Watertown 72, Mass.
Silicone rubber, specialty elastomers; potting compounds, adhesives; hermetic sealing

Badger Meter Mfg. Co., 2371 N. 30th St., Milwaukee 45, Wis.
Liquid meters

Bailey Meter Co., 1041 Ivanhoe Rd., Cleveland 10, Ohio
Electrical, mechanical, and pneumatic equipment for indicating, recording, and controlling such factors as: combustion, flow, liquid level, temperature and pressure; Data Handling Equipment; Information Systems
(See advertisement on pages, 47, 61, 65, 83, 91, 94, 100, 133, 155, 156, 160, 164, 167, 168, 177, 188, 197, 207, 212)

Baird-Atomic, Inc. 33 University Rd., Cambridge 38, Mass.
Optical, mechanical and electronic equipment for spectrochemical analysis; radioactivity instrumentation; electronic counting and control devices; telemetering systems
(See advertisement on page 72)

Baker Co., 106 Granite St., Biddeford, Maine
Testers, cleaners and tooling for ball bearings and small parts
Midwestern Representative
Sherertz-Henderson Co.
5707 W. Lake St., Chicago 44, Ill.
COlumbus 1-1032

Baker & Co., Inc., 113 Astor St., Newark 5, N. J.
Thermocouple wire; microchemical apparatus; rupture disks; precious metals

Baker Compass Co., Melrose, Mass.
Compasses

Bal Corp., William, 947 Newark Ave., Elizabeth, N. J.
Instrument cases, boxes, trucks, in fibre, plywood or aluminum

Balco Research Labs., 49-53 Edison Place, Newark 2, N. J.
Capacitors; radio noise filters

Baldwin-Lima-Hamilton Corp., Electronics and Instrumentation Div., Waltham 54, Mass.
Physical testing machines; strain gages; load cells

Balfor Industries, Inc., 1815 Webster Ave., Bronx 57, N. Y.

Ballantine Labs., Inc., Boonton, N. J.
Precision electronic voltmeters and accessories

Ballastran Corp., 1701 N. Calhoun St., Fort Wayne 7, Ind.
Instrument and power transformers

Balloffet-Vianney Wire Die Co., Inc., 6825 Adams St., Guttenburg, N. J.
Dies, diamond.

Baltic Metal Products Co., 122 Sutton St., Brooklyn 22, N. Y.
Custom built panels, rack and console housing

Baltimore Biological Laboratory, Inc., 1640 Gorsuch Ave., Baltimore, 18, Md.
Laboratory filling machines, pumps, etc.

Baltimore Instrument Co., 716 West Redwood, Baltimore, Md.
Mechanical and optical instruments

Bar-Ray Products, Inc., 209 25th St., Brooklyn 32, N. Y.
X-ray equipment

Barber-Colman Co., 1300 Rock St., Rockford, Ill.
Automatic controlling instruments for temperature, humidity, pressure liquid level, moisture regain; motor-operated valves; solenoid valves; electric power units; damper controllers, voltage-sensitive relays; associated switches and relays, fractional-hp motors; geared motor units; and hardness testers

Barber-Colman Co., Elec. Comp. & Small Motors Div., 1300 Rock St., Rockford, Ill.
Small ac-dc motors, relays, dc-ac converters

Barber Laboratories, Alfred W., 34-04 Francis Lewis Blvd., Flushing, L. I., N. Y.
Voltmeters

Barbour Stockwell Co., 205 Broadway, Cambridge 39, Mass.
Tachometers; adapters, miniature speed reducers; miniature clutches; gear boxes; flexible shafts

Barclay Instrument Div., Patent Button Co., Waterbury 20, Conn.
Polargraphic equipment; flame photometers

Barden Corp., E. Franklin St., Danbury, Conn.
Precision ball bearings.

Barksdale Valves, 5125 Alcoa Ave., Los Angeles 58, Calif.
Control valves; valve operating devices; pressure regulators, auxiliaries

Barnes Development Co., 213 W. Baltimore Pike, Lansdowne, Pa.
Electrical instruments; automatic inspection devices; motion picture cameras, sorters, resistors

Barnes Engineering Co., 30 Commerce Rd., Stamford, Conn.
Automatic assembly machines; programmed machine tool controls; infrared instruments and systems

Barnes Co., W. F. & John, Controls Div., 301 S. Water St., Rockford, Ill.
Automatic control equipment

Barnstead Still and Sterilizer Co., 2 Lansville Terrance, Boston 31, Mass.
Water stills

Barrows Porcelain Co., Langdon Farm & Penn R. R., Cincinnati 13, Ohio
Steel, glass-coated (plated) pyrometer tubes

Barry Controls, Inc., 700 Pleasant St., Watertown 72, Mass.
Vibration mountings and isolators vibration test instruments

Barton Instrument Corp., 580 Monterey Pass Rd., Monterey Park, Calif.
Indicators; recorders; flow switches; transmitters; controllers, integrators
(See advertisement on pages 91, 92, 144, 153)
Pittsburgh & Buffalo Representative
M. S. Jacobs & Associates, Inc.
810 Noblestown Rd., Pittsburgh 5, Pa. WA 1-6140
1807 Elmwood Ave., Buffalo 7, N. Y. DE 3229

Barworth, Inc., 681 Morris Turnpike, Springfield, N. J.
Control systems; medical equipments; float operated and toggle valves

Basic Controls, Inc., 1714 Westwood Blvd., Los Angeles 24, Calif.
A-C and d-c amplifiers; photo-electric controls, sensing heads for detecting radiation

Basler Electric Co., 601 Fifth St., Highland, Ill.
Transformers; inductors; chokes

Baso Inc., P. O. 461, Milwaukee 1, Wisc.
Combustion and furnace control systems and components

Bastian Bros. Co., 1700 N. Clinton Ave., Rochester 1, N. Y.

Bastion-Blessing Co., 4201 W. Peterson St., Chicago 30, Ill.
Control equipment for high pressure gases

Bausch & Lomb Optical Co., Scientific Prod. Div., 738 St. Paul St., Rochester 2, N. Y.
Optical instruments for industrial, scientific and educational use including microscopes, colorimeters, refractometers, photomicrographic and metallographic equipment, contour measuring projector, spectrum analyzers optical glass and special optical systems

Bayley Instrument Co., P. O. Box 538, Danville, Calif.
Precision temperature controllers; constant temperature baths; flowmeters
(See advertisement on page 232)

Bayside Watch Tool Co., 20-02 Utopia Pkwy. Whitestone 57, N. Y.
Machines, tools and dies for watch, clock and instrument industries

Beacon Gage Co., 11 River St., Wellesley, Mass.
Pressure gages

Bead Chain Manufacturing Co., 93 Mount Grove St., Bridgeport 5, Conn.
Contact pins, terminals, jacks and sleeves; kinkless chain.

Beamco, Inc., Irving Park & Church Rds., Bensenville, Ill.
Custom-made precision parts and products

Bear Manufacturing Co., 2030 5th Ave., Rock Island, Ill.
Balancing machines

Beattie-Colman, Inc., 1000 North Olive St., Anaheim, Calif.
Cameras; data converters; integrators; program controllers; optical test

Beaver Gear Works, Inc., 1025 Parmele St., Rockford, Ill.

Beck Bros., 421 W. Sedgley Ave., Philadelphia 40, Pa.
Resistors

Temperature Controllers
±.01° C & ±.001° C
Ranges: − 100° C to + 500° C
Write for literature
BAYLEY INSTRUMENT CO.
Box 538 **Danville, Calif.**

For more information circle **378** on inquiry card.

Beck Co., Harold, 3640 N. Second St., Philadelphia 40, Pa.
Pyrometer controllers

Becker Co., Richard F., 3020 N. Cicero, Chicago 41, Ill.
Plug-in timers for on-off cycling, process and production timing, etc.

Becker Div., Christian see Torsion Balance Co.

Beckman Div., Beckman Instruments Inc., 2500 Fullerton Rd., Fullerton, Calif.
pH instruments and electro-metric pH equipment for completely automatic indication, control and recording

Beckman Insts., Inc., Process Insts. Div., 2500 Fullerton Rd., Fullerton, Calif.
Chromatography apparatus; process control systems; water works insts.

Beckman & Whitley, 973 San Carlos Ave., San Carlos, Calif.
Anemometers, special cameras, thermal radiometers.

Beede Electrical Instrument Co., Inc., Penacook, N. H.
Small electrical panel instruments

Behlman Engineering Co., 2911 Winona Ave., Burbank, Calif.
Electronic a-c power supply (frequency ranges from subsonic to supersonic)
(See advertisement on page 139)

Behm & Sons Co., George, 24 McDonough St., Dayton 2, Ohio

Bekey Electric Co., Inc., 1327 S. Main St., Los Angeles 15, Calif.
Motors, frequency changers and generators, and associated rotary electrical equipment

Bel-Art Products, 4917 Murphy Place, West New York, N. J.
Plastic tubing and cylinders; instrument covers, fittings

Belden Mfg. Co., P.O. Box 5070A, Chicago 80, Ill.

Belfab Corp., 11 Ramah Circle, Agawam, Mass.
Metal welded bellows, bellows assemblies, surge arrester for hydraulic lines

Bell Aircraft Corp., P. O. Box 1, Buffalo 5, N. Y.
Servomechanisms; electronics; rocket engines; electronic control systems, telemetering equipment

Bell Automation Corp., 749 Monroe Ave., Rochester 7, N. Y.

Bell & Howell Co., 7100 McCormic Rd., Chicago 45, Ill.
Motion picture equipment including cameras, projectors, and accessories

Bell Sound Systems, Inc., 555 Marion Rd., Columbus 7, Ohio
Audio frequency instruments; amplifiers; hi-fi components

Bellco Glass, Inc., 413 N. 4th St., Vineland, N. J.
Glass apparatus; viscosity tubes; pipettes, and other components

Bellmore Gear Div., Empire State Laboratories, Inc., 2307 Bellmore Ave., Bellmore, N. Y.
Fine pitch precision gears; gear assemblies; motor gear heads; gear trains; mechanical instrument assemblies; splines
(See advertisement on page 102)

Bellofram Corp., Blanchard Rd., Burling, Mass.
Friction-free diaphragms, precision air pressure regulators

Bellows Co., 230 W. Market St., Akron 8, Ohio
Air motors; compressors; dryers

Belltron Mfg. Co., 400 Hoover Ave., Bloomfield, N. J.

Belmont Smelting and Refining Works, 330 Belmont Ave., Brooklyn 7, N. Y.

Belock Instrument Corp., 111th St. & 14th Ave., College Point, N. Y.
Military and naval force-control instruments; magnetic clutches; servo testing devices

Bemco Inc., 11631 Vanowen St., North Hollywood, Calif.
Vacuum pressure, humidity, salt spray, sunshine, rain, explosion, fungus, dust and other environmental test equipment.

Bendix Aviation Corp., Bendix-Pacific Div., 11600 Sherman Way, N. Hollywood, Calif.
Airborne radar, sonar, missile guidance; analog and digital telemetering; aircraft hydraulics; electromechanical actuators; timers, and motors; servomechanisms

Bendix Aviation Corp., Cincinnati Div., 3130 Wasson Rd., Cincinnati 8, Ohio

Bendix Aviation Corp., Computer Div., 5630 Arbor Vitae St., Los Angeles 45, Calif.
General purpose computers

Bendix Aviation Corp., Eclipse-Pioneer Div., Teterboro, N. J.
Electrical and mechanical aircraft instruments; remote control systems

Bendix Aviation Corp., Friez Instrument Div., 1400 P Taylor Ave., Baltimore 4, Md.
Temperature and humidity controls; gas and stoker controls; damper motors; electrical relays; temperature and humidity indicators and recorders; psychrometers; draft gages; anemometers; CO_2 analyzers

Bendix Aviation Corp., Pioneer Central Div., Davenport, Iowa
Oxygen regulators; liquid oxygen systems; fuel flowmeter systems; flight instruments; ultrasonic cleaning systems; test equipment and tools

Bendix Aviation Corp., Red Bank Div., Eatontown, N. J.
Radioactivity instruments; generators; power supplies; special purpose electron tubes

Bendix Aviation Corp., Research Labs. Div., Northwestern Hwy. & 10½ Mile Rd., Southfield Twp., Mich.
Aircraft, marine and ground instrumentation; control and telemetering systems; testing instruments; meteorological instruments

Bendix Aviation Corp., Scintilla Div., Sidney, N. Y.
Electrical connectors; protected wiring assemblies; ignition systems for aircraft and industrial engines; diesel fuel injection equipment; ignition analyzers
Los Angeles Jobber
Avnet Corporation
5877 Rodeo Rd., Los Angeles 16, Calif.
TExas 0-6141

Bendix Aviation Corp., Utica Div., French Rd., Utica, N. Y.

Bennett Products Mfg. Co., see Farnsworth, Alto Calif.

Benson-Lehner Corp., 11930 W. Olympic Blvd., West Los Angeles 64, Calif.
Computers; digitizers, trace readers; printers; components

Bentley, Harris Manufacturing Co., 1003 Bently St., Conshohocken, Pa.
Flexible braided tubular sleeving for electrical conductors; flat braided lacing tape

Bergander Mfg. Co., 2129 Warner Ave., Chicago 18, Ill.
Hardware and tools

Berger & Sons, Inc., C. L., 37 Williams St., Boston 19, Mass.
Surveying instruments

Berger Scientific Supplies, Inc., 37 Williams St., Boston 19, Mass.
Laboratory supply house

Berkeley Div., Beckman Inst., Inc., 2200 Wright Ave., Richmond, Calif.
Electrical and electronic instruments for analysis and computing; frequency meters and standards; automatic control systems; EASE analog simulation equipment
Cleveland Representative
J. R. Dannemiller Associates
3955 Lee Road, Cleveland, Ohio
LOngacre 1-4567

Berkshire Chemicals, Inc., 420 Lexington Ave., New York 17, N. Y.

Berkshire Laboratories, Packers Falls Rd., Durham, N. H.
Electronic instruments; plug-in components and circuits; pulse transformers; stroboscopes; special instruments

Bernco Engrg. Corp., 2320 S. Tibbs Ave., Indianapolis 41, Ind.
Cable assemblies, program controllers

Berndt-Bach, Inc., 6962 Romaine St., Hollywood 38, Calif.
Sound-on-film cameras; electrical and electronic instruments; components

Beryllium Corporation, P. O. Box 1462 Reading, Pa.
Beryllium copper alloy products

Beseler Co., Charles, 60 Badger Ave., Newark 8, N. J.
Optical projectors, galvanometer projectors, delineascopes

Best Scientific Glass App. Wks., 4527 N. Pulaski Rd. Chicago 30, Ill.

Beta Electric Corp., Div. of Sorensen & Co., Inc., Richards Ave., South Norwalk, Conn.
High voltage and very high voltage power supplies; testing equipment; electronic micro-ammeters; kilovoltmeters
New York Metropolitan Area Rep.
RMC Associates
236 E. 75th St. New York 21, TRafalgar 9-2023
391 Grand Ave., Englewood, N. J. LOwell 7-3933

Philadelphia Area Representative
The I. E. Robinson Company
7404 West Chester Pike, Upper Darby, Pa.
SHerwood 8-1294, FLanders 2-7017

Bethlehem Apparatus Co., Front & Depot Sts., Hellertown, Pa.
Laboratory apparatus; mercury cleaning machines

Better Coil & Transformer Corp., Goodland, Ind.
Coils; transformers

Betts & Betts Corp., 551 W. 52nd St., New York 19, N. Y.
Multiple circuit timers; controls; time delay relays; motor driven thermostatic interrupters

Beva Laboratory, P. O. Box 478, Trenton, N. J.
Power supplies; wave analyzers; amplifiers

Bicknell-Thomas Co., 90 Wells St., Greenfield, Mass.

Biddle Co., James G., 1316 Arch St., Philadelphia 7, Pa.
Insulation testers; ground testers and ohmmeters; speed-measuring instruments; frequency meters; sliding-contact rheostats
(See advertisement on pages 97, 108, 168, 186)

Biggs Co., Carl H., 2255 Barry Ave., Los Angeles 64, Calif.
Potting compounds, epoxy types; cements and adhesives; epoxy types; protective metal coatings

Bin-Dicator Co., 13946 Kercheval, Detroit 15, Mich.
Automatic bin level indication and control, aerator units
(See advertisement on page 187)

Binswanger & Co., 645-655 Union Ave., Memphis 1, Tenn.
Lenses, prisms and filters; glass of every description

Bio Rad Laboratories, 32nd and Griffin Ave., Richmond, Calif.
Water deionizers; radioactive sources; crystals

Bird Electronic Corp., 1800 E. 38th St., Cleveland 14, Ohio
Switches; wattmeters

Bird & Co., Inc., Richard H., 1 Spruce St., Waltham 54, Mass.
Jewel bearings
(See advertisement on page 14)

Birnbach Radio Co., Inc., 145 Hudson St., New York 13, N. Y.

Birtcher Corp., 4371 Valley Blvd., Los Angeles 32, Calif.
Electro-cardiagram and ultrasonic devices; cooling devices and clamps for tubes, transistors, etc.

Bishop & Co., J., Platinum Works, Malvern, Pa.
Clad metals and composite wire, contacts, tubing

Black & Decker Mfg. Co., 715 Pennsylvania Ave., Towson 4, Md.
Truck scales; testing machines

Black Light Corp., San Gabriel, California

Black, Sivalls & Bryson, Inc., 7500 E. 12th St., Kansas City 26, Mo., Climax Controls Div., Box 1529, Tulsa, Okla.
Diaphragm controls; drainers, regulators; pilots; relays; safety heads; controls for liquid level, pressure, temperature, flow of air, gas, vapor, steam, liquid.

Black & Webster, Inc., 445 Watertown St., Newton 58, Mass.
Pellet presses; time study apparatus

Blake Co., Edward, 437 Cherry St., West Newton 65, Mass.
Dimensional gages; surface-finish comparators and standard; surface-finish testing sets

Blanchard Machine Co., 64 State St., Cambridge 39, Mass.
Surface grinding machines; segment chucks; demagnetizers

Blickman, Inc., S.; 516 Gregory Ave., Weehawken, N. J.
Stainless steel, aluminum, monel, inconel, nickel, titanium, multimet alloy; dust-free enclosures

Bliley Electric Co., 200 Union Station Bldg., Erie, Pa.
Quartz piezo-electric crystals; frequency standards; delay lines

Bliss & Co., Inc., John, 84 Pearl St., New York 4, N. Y.
Marine instruments

Block Mfg. Co., Dairy Rd., Parktour, Md.

Blocksom & Co., E. 5th St. & Canal, Michigan City, Ind.

Blonder-Tongue Laboratories Inc., 9 Alling St., Newark 2, N. J.
Industrial TV cameras; R-F amplifiers; master TV systems; UHF and VHF converters; video monitors

Blue M Electric Co., 138th & Chatham St., Blue Island, Ill.
Furnaces and furnace-control systems

Blum & Co., Julius, Carlstadt, N. J.

Bock Machine Co., 2950 Jonrose Ave., Cincinnati 24, Ohio
Erichsen sheet metal testing machine

Bodine Electric Co., 2500 W. Bradley Pl., Chicago 18, Ill.
Motors, (all types of windings from 1/20000 to 1/6 hp.); speed reducers and non-reducer motors

Bodnar Industries Inc., 238 Auguenot St., New Rochelle, N. Y.

Boehm Co., R. A., 58 Brooklyn Ave., Merrick, L. I., N. Y.
Fractional hp. motors

Boehme, Inc., H. O., 915 Broadway, New York 10, N. Y.
Gears, precision; telegraphy equipment; radiotelegraph communication equipment, tape perforators

Boehmke Optical Co., 3737 Bird Road, Miami 33, Fla.
Precision optical manufacturers

Boekel & Co., Wm., 509-519 Vine St., Philadelphia 6, Pa.
Laboratory apparatus

Bogart Manufacturing Co., 315 Siegel St., Brooklyn 6, N. Y.
Microwave components, radar assemblies

Bogue Electric Mfg. Co., 52 Iowa Ave., Patterson 3, N. J.
Voltage and speed regulators; magnetic amplifiers and controllers; ac and dc motors and generators; switchboards

Bomac Laboratories, Inc., Beverly, Mass.

Bond Electronics Corp., 60 Springfield Ave., Springfield, Ill.

Bone Engineering Corp., 701 W. Broadway, Glendale 4, Calif.
Magnetic amplifiers; regulated power supplies

Boone Instrument Co., 130 East 7th St., New York 9, N. Y.
Microscope illuminators; electrometer voltmeter, micro-microammeter, and ohmeter; custom-built microscope and photomicrographic set-ups.

Boonton Electronics Corp., Morris Plains, N. J.
Electric test equipment.

Boonton Molding Co., 326 Myrtle Ave., Boonton, N. J.

Boonton Radio Corp., P. O. Box 390, Boonton, N. J.
Electronic test instruments; aircraft glide slope and omni-range navigational system test equipment; metal film gauges

Borden Engineering, Div., Johnson Aircraft Engineering Co., Box 10, Morristown, N. J.
Fault locators; galvanometers; geophysical explorations equipment; ground detectors; rotary solenoids; aircraft cockpit controls and instruments; aircraft instrument test sets.

Borg Corp., Geo. W., Equipt. Div. 120 S. Main St., Janesville, Wis.
Precision multiturn potentiometers; concentric scale, direct reading counting dials; sub-fractional induction and synchronous motors
(See advertisement on page 10)

Representative—Wash., Ore., Idaho, Mont.
Burt C. Porter Company
1209 Poplar Place, Seattle, Wash.
EAst 3-8330

Bosca Co., Hugo, 106 E. Main St., Springfield, Ohio

Boston Auto Gage Co., 70 West St., Pittsfield, Mass.
Liquid level gages and allied lines

Boston Electronics Div., Norden-Ketay Corp., Snow & Union Sts., Boston 35, Mass.
Medical research instruments; pressure and vacuum gages; VTVMs

Boston Gear Works, 100 Hayward, Quincy 71, Mass.
Speed reducers; self-lubricating bearings; flexible couplings; precision gears

Boston Insulated Wire & Cable Co., 65 Bay St., Boston 25, Mass.
High temperature single, coaxial, and multiconductor insulated wire; multiconductors; neoprene, silicone, plastic insulation and jackets.

Bostrom-Brady Mfg. Co., Stonewall & Bailey Sts., S.W., Atlanta, Ga.
Surveying instrument

Boulin Instrument Corp., 10 First Street, Pelham, N. Y.
Chronometric hand tachometers; wound stroboscopes. electrical stroboscopes; speed indicators, and portable and stationary tachometers

Bourns Laboratories, Inc., 6135 Magnolia Ave., Riverside, Calif.
Pressure and displacement pickups; resistors

Bowen & Co., Inc., Chapman Ave., Bethesda, Md.
Cement testers

Bowmar Instrument Corp., P. O. Box 2835, Fort Wayne 4, Ind.
Precision gear heads; speed reducers; mechanical counters; navigational counters; servomechanisms and electromechanical assemblies.

Bowser, Inc., Fort Wayne Div., 1302 E. Creighton Ave., Fort Wayne 2, Ind.
Liquid meters

Bowser Technical Refrigeration, Division of Bowser, Inc., Terryville, Conn.
Testing cabinets—low temperature, high altitude, relative humidity; explosion, sand and dust, and fungus chambers

Boylston Steam Specialty Co., 116 W. Illinois St., Chicago 10, Ill.
Regulating valves

Brabender Corp., 244 Saddle River Rd., Rochelle Park, N. J.

Brabender Instruments, Inc., C. W., 50 E. Wesley St., South Hackensack, N. J.
Test instruments for asphalt, oil, concrete and cement, coal, paint, petroleum, textiles, rubber; hardness plasticity, viscosity, consistency

Bradford Machine Tool Co., 702 Porter St., Lansing, Mich.

Bradley Laboratories, Inc., 168 Columbus Ave., New Haven 11, Conn.
Electrical instruments

Bradshaw Instruments Co., 42 Flatbush Ave., Brooklyn 17, N. Y.
Electrical instruments

Brady Co., W. H., 727 W. Glendale Ave., Milwaukee 9, Wis.
Markers; labels; safety signs

Brainin Co., C. S., 320 Washington St., Mt. Vernon, N. Y.
Precious metal contact points and rivets; contact bimetals
(See advertisement on page 65)

Brand Co., William, North & Valley Sts., Willimantic, Conn.
Plastic insulated wires; cables with or without textile braids; shields; nylon or vinyl jackets; plastic and coated sleevings; identification markers

Branson Corp., S. Jefferson Rd., Whippany, N. J.
Miniature magnetic and thermal time delay relays.

Branson Instruments, Inc., 37 Brown House Rd., Stamford, Conn.
Thickness gages (tube and sheet metal); ultrasonic generators

Representative—Pittsburgh, Cleveland, Buffalo
R. L. Holliday Co.
Box 10333, Pittsburgh 34, Pa.
Locust 1-7620

Branson Ultrasonic Corp., 37 Brown House Rd., Stamford, Conn.
Ultrasonic cleaning equipment
(See advertisement on page 58)

Bray Optical Co., 3445 W. 1st St., Los Angeles 4, Calif.
Lenses, prisms and optical instruments; observation scopes

Breeze Corporations, Inc., 700 Liberty Ave., Union, N. J.
Light-weight aircraft rescue and cargo hoists; aircraft starter generators; shielding conduit.

Brevel Prods., Inc., 601 W. 26th St., New York, N. Y.
Slow-speed fractional-HP worm and spur geared motors.

Brew & Co., Inc., Richard D., Airport Rd., Concord Plains, N. H.
Delay lines; pulse transformers
(See advertisement on page 77)

Bridgeport Thermostat Div., Robertshaw-Fulton Controls Co., 155 Hill St., Milford, Conn.
Metallic bellows and thermostats

Briggs Filtration Co., River Road, Washington 16, D. C.
Filtration equipment for lubricating oils, fuels, coolants hydraulic fluids, insulating oils, compressed air lines, and instrument air

Brigham Co., R. B. Box 302, Frankton, Ind.
Photoelectric controls

Brinkmann Instruments, Inc., Brinkmann House, 115 Cutter Mill Rd., Great Neck, L. I., N. Y.
Photomicrographic equipment; balances
(See advertisement on page 87)

Bristol Co., P. O. Box 790 IABG, Waterbury 20, Conn.
Recording and automatic (pneumatic and electric) controlling instruments for pressure, vacuum, draft, absolute pressure, humidity, liquid level, flow, pH, temperature, speed; including recording barometers, voltmeters, ammeters, wattmeters, machine operation,

motion and time recorders; control valves; telemetering instruments; process time cycle; potentiometers; thermal convertors; gas chromatography recorders; socket set and cap screws; aircraft electronic components
(See advertisement on pages 65, 133, 135, 138, 148, 156, 189, 194, 199)

Bristol Brass Corp., 580 Broad St., Bristol 91, Conn.

Bristol Engineering Corp., Bristol, Pa.
Industrial and laboratory instrumentation; power supplies; components

Bristol Instrument Gears, Inc., Union St., Bristol, Conn.
Gears, cams, number discs

Bristol Motor Div., see Vocaline Co. of Amer.

British Electronic Sales Co., Inc., P. O. Box 132 Oakland Gardens, Bayside 64, N. Y.
Electronic instruments and components

British Industries Corp., 80 Shore Rd., Port Washington, L. I., N. Y.
Audio amplifiers; solder; coil winding machines, metal prefab cabinet components
(See advertisement on page 51)

Brodie Co., Inc., Ralph N., Alvardo & W. 137th Ave., San Leandro, Calif.
Positive-displacement rotary liquid meters; solenoid-pilot-operated valves

Bronoptics Co., 1665 Oak Knoll Ave., San Marino Calif.
Lenses; mirrors; prisms; coatings

Brookfield Engineering Laboratories, Inc., 240 Cushing St., Stoughton, Mass.
Viscometers.

Brooks Rotameter Co., 415 W. Vine St., Hatfield, Penna.
Complete line of instrumentation, specializing in rotameters, for flow measurements and automatic control

Pittsburgh Representative
M. S. Jacobs & Associates, Inc.
810 Noblestown Rd., Pittsburgh 5, Pa.
WAlnut 1-6140

Brooks & Perkins, Inc. 1950 W. Fort St., Detroit 16, Mich.
Magnesium sheet and plate, magnesium and titanium assemblies, chassis

Brown Electro-Measurement Corp., 4635 S.E. Hawthorne Blvd., Portland 15, Ore.
Electrical instruments and components

Browne-Morse Co., 110 E. Broadway Heights, Muskegon, Mich.
Laboratory furniture

Brown & Sharpe Mfg. Co., 235 Promenade St., Providence 1, R. I.
Machine shop instruments

Browning Laboratories, Inc., 750 Main St., Winchester, Mass.
Frequency meters; signal generators; cathode-ray oscillographs

Brubaker Inc., James E., 1865 Grove St., Glenview, Ill.
Motion-picture and still cameras (custom); optical components

Bruning Co., Inc., Chas., 4700 Montrose Ave., Chicago 41, Ill.
Drawing and surveying instruments

Bruno-New York Industries Corp., 460 W. 34th St., N. Y. 17, N. Y.

Brunson Instrument Co., 1405 Walnut St., Kansas City 6, Mo.
Surveying instruments

Brunswick Instruments, P. O. Box 813, New Brunswick, N. J.
Phase sequence indicators; voltmeter inverters; voltage coefficient test sets

Brunt & Co., 6906 W. 65th St., Chicago 38, Ill.

Brush Instruments, Div. of Clevite Corp., 3631 Perkins Ave.
Direct recording systems—high gain, medium gain, carrier, or servo; operations recorders, surface measuring instruments
(See advertisement on page 6, 7)

Bryant Chucking Grinder Co., Computer Prods. Div., P. O. Box 730, Springfield, Vt.
Magnetic drums for digital computers; inventory control systems; tape to card converters

Sales Representatives

Roslyn, Long Island, N. Y.
M. John Wild
Wild & Associates, Inc.
1519 Northern Blvd.

La Canada, California
Mr. H. W. Ruby
R. & D., Inc.
P.O. Box 308

Buchanan Electrical Products Corp., 256 U. S. Route 22, Hillside, N. J.
Terminal blocks; terminals; solderless installation tools

Bud Radio, Inc., 2118 E. 55th St., Cleveland 3, Ohio
Electronic components; instrument housings and panels

Budd-Stanley Co., Inc., 4301 22nd St., Long Island City 1, N. Y.
Filters, microwave eqpmt., transformers

Buehler, Ltd., 2120 Greenwood St., Evanston, Ill.
Laboratory supply house

Buffalo Meter Co., 2917 Main St., Buffalo 14, N. Y.
Liquid meters for measurement of cold water, hot water, oils, chemicals; integrating registers, cumulative, setback, or predetermined control
(See advertisement on page 92)

Buggie & Co., H. H., 726 Stanton St., Toledo 1, Ohio
Connectors, plugs, jacks, clips

Buhl Optical Co., 1009 Beech Ave., Pittsburgh 33, Pa.
Precision optical components and instruments

Builders-Providence, Inc., see B-I-F Industries

Bullard Co., E. D., 275 Eighth St., San Francisco 3, Calif.
Gas leak detectors

Bunnell Company, J. H., 81 Prospect St., Brooklyn 1, N. Y.
Telegraphy equipment, frequency converters, tape handling equipment, pen registers

Burdett Mfg. Co., 4920 So. Monitor, Chicago 38, Ill.

Burgess Battery Co., Freeport, Ill.
Dry cell batteries for flashlights, lanterns, portable and farm radios, ignition, hearing aids, industrial electronic and transistor applications
(See advertisement on page 44)

Burke Electric Co., 8544 Grand River Ave., Detroit 4, Mich.
Fractional horsepower motors

Burke & James, Inc., 321 S. Wabash, Chicago 4, Ill.
Photographic equipment for research and laboratory departments

Burke, Louis, 41 John St., New York, N. Y.
Stop watches and chronometers

Burling Instrument Co., 16 River Rd., Chatham, N. J.
Automatic temperature controllers
(See advertisement on page 192)

Burndy Corp., Omaton Div., Norwalk, Conn.
Connectors, plugs and jacks

Burnell & Co., Inc., 10 Pelham Parkway, Pelham Manor, N. Y.
Wave filters; components

Burrell Corp., 2223 Fifth Ave., Pittsburgh 19, Pa.
Scientific instruments & laboratory supplies

Burroughs Corp., Electronics Inst. Div., 1209 Vine St., Phila. 7, Pa.
Computers; automatic regulators; electrical and electronic instruments and components

Burroughs Corp., Electronic Tube Div., Plainfield, N. J.
Numerical indicator (NIXIE) and magnetron beam switching tubes, pulse control equip., decade counters

New York Metropolitan Area Rep.
RMC Associates
236 E. 75th St., New York 21, TRafalgar 9-2023
391 Grand Ave., Englewood, N. J. LOwell 7-3933

Representative—Texas, Okla., Ark., La.
Arnold Barnes Co.
3603 Lemmon Ave., Dallas 19, Texas LA-6-8735
3913 East 2nd Place, Tulsa 12, Okla. MA-6-7707

Burrows Equipment Co., 1316 Sherman Ave., Evanston, Ill.
Moisture testers

Burton Mfg. Co., 2520 Colorado Ave., Santa Monica, Calif.
Aircraft instruments; ground support testing equipment; meteorological equipment; medical, dental, hospital, laboratory, industrial equipment

Burton-Rogers Co., Sales Div. Hoyt Electrical Instrument Works, Inc., 42 Carleton St., Cambridge, Mass.
D-c and a-c meters

Bush Associates, G. F., Box 175, Princeton, N. J.
Rubber, plastics and textile testers; laboratory apparatus

Bushnell & Co., D. P. 273 Bushnell Bldg., Pasadena 1, Calif.
Binoculars, microscopes, telescopes, and other optical instruments; accessories and supplies
(See advertisement on page 171)

Bussmann Mfg. Div., McGraw-Edison Co., University at Jefferson, St. Louis 7, Mo.
Fuses and fuse mountings of all types for electronic and electric circuits

Butler Manufacturing Corp., 5516 Dorsey Lane, Washington 16, D. C.
Counters; digital computers switches; components

C

CBS-Hytron Div., Columbia Broadcasting System, Inc., 100 Endicott St., Danvers, Mass.
Electron tubes; semiconductors

CDC Control Services, Inc., 400 S. Warminster Rd., Hatboro, Penna.
Dynamic control systems for aeronautical test facilities and industrial processes

Pittsburgh & Buffalo Representative
M. S. Jacobs & Associates, Inc.
810 Noblestown Rd., Pittsburgh 5, Pa. WA-1-6140
1807 Elmwood Ave., Buffalo 7, N. Y. DE-3229

CGS Laboratories, Inc., Ridgefield, Conn.
Automatic telegraph, magnetic tape equipment, electronic equipment

C & H Supply Co., 415 E. Beach Ave., Inglewood 3, Calif.
Nameplates; marking devices

Caddell-Burns Mfg. Co., Inc., 40 E. 2nd St., Mineola, L. I., N. Y.

Cadillac Gage Co., 20316 Hoover Road, Detroit 5, Mich.
Electrohydraulic servo valves; valve-actuator assemblies; precision gages; ring, plug, cylindrical, thread gages

Cady & Co., E. J., 630 N. Harlem Ave., River Forest, Ill.
Non-destructive testers for physical properties

Cahn Instr. Co., 14511 Paramount Blvd., Paramount Calif.
Portable, battery-operated, electromagnetic microbalance

Caig Laboratories, 46 Stanwood Rd., New Hyde Park, L. I., N. Y.
Lubricants, chemical cleaners

Cal-Astro Optical Laboratories, 30 N. San Gabriel, Pasadena, Calif.
Precision optical parts

Calectron, Inc., 2444 Beverly Rd., St. Paul 4, Minn.
Fluorimeters

Caledonia Electronics and Transformer Corp., Maple St., Caledonia, N. Y.
Audio, power and pulse transformers; charging and saturable reactors; high voltage dc power supplies

Calidyne Co., 120 Cross St., Winchester, Mass.
Accelerometers and vibration pickups; a-f voltage standards; power supplies

California Computer Products, 3927 W. Jefferson Blvd., Los Angeles 16, Calif.
X-Y recorder for use with magnetic-drum differential analyzers, transistorized regulated power supplies

California Magnetic Control Corp., 11922 Valerio St., N. Hollywood, Calif.
Electrical instruments; testers; transformers

California Tech. Indust., Div. of Textron Inc., 1421 Old County Rd., Belmont, Calif.
Automatic circuit testers; radome test equipment; VSWR measuring systems; flight and altitude simulators, microwave antenna pattern recording equipment

Callahan & Co., E. J., 5 N. Haven St., Baltimore, Md.
Laboratory supply house

Calmag Div., California Magnetic Control Corp., 11922 Valerio St., North Hollywood, Calif.
Electronic amplifiers; power supplies; dc-ac convertors

Cal-Ohm Laboratories, Sterling, Kansas
Power supplies; resistors; filters; potted circuits

Calresin Corp., 4545 Brazil St., Los Angeles 39, Calif.

Cal-Tronics Corp., 11307 Hindry St., Los Angeles 45 Calif.
Production, depot and field test equipment for radar computer and missile systems

Cambridge Instrument Co., Inc., 3614 Grand Central Terminal, New York 17, N. Y.
Scientific and industrial instruments

Cambridge Thermionic Corp., 445 Concord Ave., Cambridge 38, Mass.
RF and IF coils; coil forms; insulated terminals; terminal boards, solder terminals; panel hardware; chassis hardware

Cambridge Wire Cloth Co., Cambridge 4, Md.

Camdale Precision, Inc., 28300 Groesbeck Hwy., Roseville, Mich.
Precision ground gears, cams

Cameron Iron Works, Inc., P. O. Box 1212, Houston, Texas
Pressure gages; dynamometers; valves and valve-operating units

Cameron Surgical Specialty Co., 666 W. Division St., Chicago 10, Ill.
Surgical instruments

Campbell Co., J. A., 645 Wardlow Rd., Long Beach 7, Calif.
Thermometer wells and automatic controllers

Canadian Radium & Uranium Corp., 630 Fifth Ave., New York 20, N. Y.
Luminous, phosphorescent and fluorescent paints for applications on dials, panels, nameplates; flat, convex and concave surfaces

Cannon Electric Co., 3208 Humboldt St., Los Angeles 31, Calif.
Multiple contact electric connectors; dc solenoids
Authorized Distributor
Pioneer Electronic Supply Corp.
2115 Prospect Ave., Cleveland 15, Ohio
SUperior 1-3410

Cannon Instrument Co., Box 812, State College, Pa.
Viscometers

Canoga Corp., 5955 Sepulveda Blvd., Van Nuys, Calif.
Radio and radar instrumentation, and test equipment

Capcon Corp., 25 Willett St., New York 2, N. Y.
Capacitors and filters

Capeway Instrument Corp., Highland Ave. at N. Bedford St., East Bridgewater, Mass.
Elapsed time recorders

Cerad Corp., 2850 Bay Rd., Redwood City, Calif.
Pulse transformers; pulse forming networks; wave filters & toroidal inductors; modulators

Carbon Div., Stackpole, Carbon Co., St. Marys, Penna.

Carborundum Co., Niagara Falls, N. Y.

Carborundum Co., Refractories Div., Latrobe, Penna.
Ceramic thermocouple insulators, protection tubes, thermistors

Cardinal Instrumentation Corp., 4201 Redwood Ave., Los Angeles 66, Calif.
Specialized resistance transducers, thermocouples and systems

Cardwell Mfg. Corp., Allen D., 97 Whiting St., Plainville, Conn.
Electrical and electronic instrumentation, control systems; power units; radar equipment; industrial TV; components

Cargille Scientific, Inc., 117 Liberty St., New York 6, N. Y.
Chemical laboratory and photographic devices; immersion liquids for inspecting glass & quartz

Carling Electric, Inc., 505 Park Ave., West Hartford, Conn.

Carlingo Commodities Corp., 15 William St., New York 5, N. Y.
Pyrometers and temperature controllers

Carol Electronics Corp., 315 W. Stephens St., Martinsburg, W. Va.
Transformers; coils; power supplies; resistors

Carpenter Steel Co., 125 W. Bern St., Reading, Penna.
Tool and die steels; stainless steels, silicon and high nickel alloys; super alloy steels, tubing

Carroll Co., J. B., 319 N. Albany Ave., Chicago 12, Ill.
Products manufactured from plastic sheet materials

Carruthers & Fernandez, Inc., 1501 Colorado Ave., Santa Monica, Calif.
Control valves; power units; solenoids; pressure switches

Carter Mfg. Corp., 23 Washington St., Hudson, Mass.
Potentiometers, potentiometer test equipment

Carter Motor Co., 2711 W. George St., Chicago 18, Ill.
Dc to ac converters; dynamotors; generators; magmotors; inverters; tachometer generators
(See advertisement on page 188)

Carter Parts Co., 3401 Madison St., Skokie, Ill.
Relays; resistors; rheostats and switches

Carver, Inc., Fred S., One Chatham Road, Summit, N. J.
Testing Machines; laboratory presses; high-pressure instrumentation

Cash Co., A. W., P. O. Box 551, Decatur, Ill.
Process and combustion controls; pressure reducing relief, back pressure regulating, hydraulic, expansion valves; governors; water regulators; pressure and temperature controls

Cash Valve Mfg. Corp., A. W., 6619 East Wabash, Decatur 60, Ill.
Pressure, vacuum and temperature controllers; control valves

Cassell Co., John R., 110 W. 42nd St., New York 36, N. Y.

Cast Optics Corp., 123 Newman Street, Hackensack, N. J.
Laboratory supply house

Cawi Machine Co., Inc., 34 Exchange Pl., Jersey City 2, N. J.
Automatic grinding machines

Cedar Engineering, Inc., 5806 W. 36th St., Minneapolis 16, Minn.
Aircraft electro mechanical controls and systems, including accelerometers, gyros, autopilots, sensing, and guidance devices

Central Instrument Co., 565 E. Milwaukee, Detroit 2, Mich.
Pressure and vacuum indicators and recorders

Central Research Labs., Inc., Red Wing, Minn.
Remote handling equipment; master-slave manipulators; dielectric constant and loss measuring equipment; ultra high-speed cathode-ray oscillographs.

Central Scientific Co., 1700 Irving Park Blvd., Chicago 13, Ill.
Scientific instruments & laboratory apparatus

Centralab Div., Globe Union Inc., 900 E. Keefe Ave., Milwaukee 1, Wis.
Carbon and wirewound and variable resistors; ceramic and phenolic switches; tubular and disc ceramic capacitors; packaged electronic circuits, steatite ceramics, semi conductors
(See advertisement on page 235)

CENTRALAB SALES REPRESENTATIVES

CALIFORNIA: San Francisco
Logan Sales Co.
154 Eighth St., Hemlock 1-0652

CALIFORNIA: Beverly Hills
Walter S. Harmon Co.
P. O. Box 2380 Olympia 2-5625

COLORADO: Denver
McLeod & Raymond Co.
540 E. Evans Skyline 6-1580

GEORGIA: Atlanta
Frank Nickerson
1202 Zonolite Rd. N.E., Trinity 5-8808

ILLINOIS: Chicago
F. L. Tiegs & A. A. MacDonald
5308 W. Diversey, Palisade 5-5366

INDIANA: Indianapolis
L. M. DeVoe Co.
4010 Washington Blvd., Atwater 3-1335

IOWA: Cedar Rapids
Jerry Vrbik
615 Guaranty Bldg., Empire 4-0833

MASSACHUSETTS: Needham
Stanley A. Harris Co.
1241 Highland Ave., Hillcrest 4-4780

MICHIGAN: Detroit
R. C. Merchant
18411 W. McNichols Rd., Kenwood 5-6000

MINNESOTA: Minneapolis
Merrill K. Franklin
338 E. Franklin, Federal 6-2315

MISSOURI: Kansas City
E. W. McGrade
Box 8876 Prairie Village Sta., Randolph 2-0758

MISSOURI: St. Louis
Theodore B. Lowell
Box 21 Normandy Branch, Evergreen 5-7803

NEW JERSEY: Jersey City
D. P. Galasso
921 Bergen Avenue, Oldfield 9-7277

NEW YORK: Dewitt
George P. Marron
4455 E. Genesee, Gibson 6-1974

OHIO: Brecksville
Allen Nace Co.
7601 Parkview Rd., Jackson 6-4323

PENNSYLVANIA: Philadelphia
S. K. MacDonald, Inc.
1531 Spruce St., Kingsley 5-1205

PENNSYLVANIA: Philadelphia
Jerome Bresson
246 Haverford Ave., Mohawk 4-4272-73

TENNESSEE: Memphis
Al S. Engelman
3205 Crump Avenue, Glendale 8-6263

TEXAS: Dallas
Robert E. Nesbitt
1925 Cedar Springs, Riverside 7-5824

WASHINGTON: Seattle
J. J. Backer Co.
221 Galer St., Atwater 3-6470

CANADA: Toronto
P. J. Heenan Co.
804 Mt. Pleasant Rd., Hudson 1-2231

CANADA: Vancouver
D. E. McLennan
1624 W. Third Ave. Bayview 2898

HAWAII: Honolulu
Hastin & Browne
P. O. Box 2098-998910

Centrico, Inc., 75 W. Forest Ave., Englewood, N. J.
Centrifuges

Century Controls Corp., 80 E. Montauk Highway, Lindenhurst, L. I., N. Y.
Tubing fittings; pneumatic valves and regulators

Century Electronics & Instruments, Inc., 1333 N. Utica St., Tulsa 10, Okla.
Recording oscillographs; electronic instruments; pressure switches
Representative—Texas, Okla., New Mexico
Arnold Barnes Co.
3606 Lemmon Ave., Dallas 19, Texas LA-6-8735
2913 East 2nd Place, Tulsa 12, Okla. MA-6-7707

Century Instrument Co., 565 E. Milwaukee Ave., Detroit 2, Mich.
Temperature regulators and recording controllers for water heaters, process and plating tanks; diaphragm valves

Ceramaltronics, Inc., 364 Highland Ave., Passaic, N. J.
Hermetically sealed bushings, connectors, terminals, etc.

Ceramseal, Inc., P. O. Box 25, New Lebanon Center, N. Y.
High temperature alumina ceramic to metal sealed terminals; sapphire to metal and high pressure seals

Cerro de Pasco Sales Corp., 300 Park Ave., New York 22, N. Y.
Low temperature melting bismuth alloys

Chace Co., W. M., 1600 Beard Ave., Detroit 9, Mich.
Thermostatic bimetals

Chadwick-Helmuth Co., 472 E. Duarte Rd., Monrovia, Calif.
Stroboscopic light synchronizers; pulse generators for stroboscopes; oscilloscope synchronizers; computers; pulse cameras

Chaloux & Co., John J., Watervliet, N. Y.

Chandler & Stedman, 398-A Newton St., Waltham 54, Mass.
Special laboratory apparatus

Channer Corp., 1488 Skokie Blvd., Highland Park, Ill.

Chapman Laboratories, P. O. Box 207, West Chester, Pa.

Chatham Controls Corp., 33 River Rd., Chatham, N. J.

Chatham Electronics Corp., Div. of Tung Sol Electric, Inc., 630 W. Mt. Pleasant Ave., Livingston, N. J.
Electronic devices; radio tubes; equipment and mechanical assemblies; radiological survey meters, radio communication equipment; amplifiers; relays; selenium rectifiers; transformer-rectifier units

Chatillon & Sons, John, 85 Cliff St., New York 38, N. Y.
Precision springs; force measuring instruments
Philadelphia Area Representative
William R. Scholes
P. O. Box 104, Cheltenham, Penna.
PIlgrim 5-2765

Chemalloy Electronics Corp., Gillespie Airport, Santee, Calif.
Microwave instrumentation; alloys and solders

Chemical Rubber Co., 2310 Superior, East, Cleveland 14, Ohio
Laboratory supplies

Chemiquip Co., 36 E. 10th St., New York 3, N. Y.
Pressure snubbers; porous filters

Cherry Electrical Prods. Corp., 42 N. Skokie Valley Rd., Highland Park, Ill.

Chesapeake Instrument Corp., Shadyside, Md.
Electroacoustic instruments; piezoelectric and magnetostrictive hydrophones and projectors; transient pressure air blast gages; accelerometers; vibration instruments

Chester Cable Corp., Chester, N. Y.
Flexible tubing and control cable; coaxial electric cable, and wire

Chicago Aerial Industries, Inc., 1980 Hawthorne Ave., Melrose Park, Ill.
Computers; network analyzers; precision resistors

Chicago Apparatus Co., 1735 N. Ashland Ave., Chicago 22, Ill.
Laboratory supplies

Chicago Condenser Corp., 3255 W. Armitage Ave., Chicago 47, Ill.
Paper and plastic film dielectric capacitors

Chicago Dial Co., 2917 S. La Salle St., Chicago 16, Ill.

Chicago Dial Indicator Co., 180 N. Wacker Dr., Chicago 6, Ill.
Machinists's dial indicators

Chicago Electric Tachometer Co., 111 Lake St., Madison, Ohio
Electric tachometers; portable tachometers; speed indicators

Chicago Electronic Engineering Co., 3223 W. Armitage Ave., Chicago 47, Ill.
Transformers

Chicago Industrial Instruments Co., 865 N. Sangamon St., Chicago 22, Ill.
Radio, electronic and industrial test equipment

Chicago Miniature Lamp Works, 1500 N. Ogden Ave., Chicago 10, Ill.
Miniature, sub-miniature incandescent lamp bulbs

Northeastern United States Rep
Hoffman Engineering Corp.
183 R Sound Beach Ave.
Old Greenwich, Conn. NEptune 7-3557

Chicago Molded Products Corp., 1020 N. Kolmar Ave., Chicago 51, Ill.
Plastic components, stock plastic knobs, thermoplastic sheet and film

Chicago Rawhide Mfg. Co., 1301 Elston Ave., Chicago 22, Ill.
Non-metallic gears and pinions, oil seals; diaphragms packings; etc.

Chicago Screw Co. Div., Standard Screw Co., 2701 Washington Blvd., Bellwood, Ill.
Socket, cap, set screws; hex keys and nuts; studs.

Chicago Standard Transformer Corp., 3501 Addison St., Chicago 18, Ill.
Instrument and power transformers

Chicago Telephone Supply Corp., 1142 W. Beardsley Ave., Elkhart, Ind.
Variable resistors; switches

Chicago Thrift-Etching Corp., 1555 N. Sheffield Ave., Chicago 22, Ill.
Etched and lithographed nameplates; dials; scales and panels

Chicago Wheel & Mfg. Co., 1101 W. Monroe St., Chicago 7, Ill.

Chicksan Company, Brea, Calif.
Ballbearing swivel joints

Pittsburgh Area Representative
W. A. Stoeltzing, Inc.
940 Western Ave., Pittsburgh 33, Pa.
ALlegheny 1-9400

Christie Electric Corp., 3410 West 67th St., Los Angeles 43, Calif.
Automatically regulated and manually controlled d-c power supplies; battery chargers

Chrono-Log Corp., P. O. Box 4587, Philadelphia 21, Pa.
Digital Timing Units.

Churchill Lighting Corp., 344 Franklin St., Melrose 76, Mass.
Airborne aluminum cases; explosion-proof cases

Ciba Co., Inc., 631 Greenwich, New York 14, N. Y.

Cinch Manufacturing Co., Howard B. Jones Div., 1026 S. Homan Ave., Chicago 24, Ill.
Etched circuit boards; printed circuits; commutators, terminal boards, flexible printed cabling; printed circuit connectors; printed circuit sockets.

Cincinnati Clock & Instrument Co., 1060 Hulbert St., Cincinnati 14, Ohio
Circuit breaker analyzers

Cincinnati Sub Zero Products, 3930 Reading Rd., Cincinnati 29, Ohio
Temperature and altitude cabinets

Midwestern Representative
Shrertz-Henderson Co.
5707 W. Lake St., Chicago 44, Ill.
COlumbus 1-1032

Cincinnati Time Recorder Co., 1733 Central Ave., Cincinnati 14, Ohio
Time recorders; clocks; program control systems

Cinema Engineering Div., Aerovox Corp., 1100 Chestnut St., Burbank, Calif.
Ceramic bobbin and encapsulated types wire-wound resistors; decade resistance boxes; instrument switches; rotary tap controls; demagnetizers

Circle Gauge Co., P. O. Box 2524, Hollywood 28, Calif.
Piston ring gages

Circle Seal Products Co., Inc., Box 5455 Pasadena, Calif.
Precision check valves; relief valves, and manual shut-off valves

Circo Equipment Co., 51 Terminal Ave., Clark (Rahway), N. J.
Ultrasonic and detergent cleaning machines

Circon Component Co., Santa Barbara Municipal Airport, Goleta, Calif.
Electrical connectors; indicating lamp assemblies; precision miniature hardware: instrument screws, nuts, eyelets, rivets, flat and lock washers
(See advertisement on page 63)

Circuit Instruments Inc., 1927 First Ave., S., St. Petersburg, Fla.
Precision wire-wound, single, multiturn, linear and non-linear potentiometers

Circular Tool Co., Inc., 763 Allen Ave., Providence 5, R. I.

Clairex Corp., 50 W. 26th St., New York 10, N. Y.
Photoconductive-type photocells

Clare & Co., C. P., 3101 Pratt Blvd., Chicago 45, Ill.
Relays; electric counters and electric mechanical specialties

Clark Co., Geo. P., 150 Canal St., Windsor Locks, Conn.

Clark Controller Co., 1146 E. 152nd St., Cleveland 10, Ohio
Machine tool control systems

Clark-Cooper Co., Palmyra (Burl. Cty.), N. J.
Timers, alarms, controllers

Clark Crystal Co., Inc., 29 Farm Rd., Malboro, Mass.

Clark Instrument Inc., 10200 Ford Road, Dearborn, Mich.
Dial indicators, testing machines

Clark Mfg. Co., 1830 E. 38th St., Cleveland 14, Ohio
Torque-measuring equipment; dynamometers; magnetic-particle clutches

Pittsburgh Representative
Forbes-Western, Inc.
940 Western Ave., Pittsburgh 33, Pa.
ALlegheny 1-9400

Clark & Sons, Co., Alvan, 58 Day St., West Somerville, Mass.
Astronomical and terrestrial telescopes

Clarostat Mfg. Co., Inc., Washington St., Dover, N. H.
Potentiometers, resistors, switches

Clary Corp., 408 Junipero St., San Gabriel, Calif.
Computers; readout machines; computer components; printers; recorders; tape punch equipment

Clay-Adams Co., Inc., 141 E. 25th St., New York 10, N. Y.
Centrifuges, laboratory apparatus, medical equipment, microscope illuminators

Clebar Watch Co., 15 W. 44th St., New York 36, N. Y.
Stop watches; timers and chronographs

Clegg Laboratories, Morristown, N. J.

Cleveland Controls, Inc., 1111 Brookpark Rd., Cleveland 9, Ohio
Furnace controllers; pyrometers and gages

Cleveland Instrument Co., 6220 East Schaaf Rd., Cleveland, Ohio
Precision measuring instruments

Cleveland Metal Specialties Co., 1753 E. 21st St., Cleveland 14, Ohio
Printed circuits and allied components

Cleveland Process Co., 1967 E. 57th St., Cleveland 3, Ohio
Heating elements, infrared sources; thermowells

Cleveland Tungsten, Inc., 10200 Meech Ave., Cleveland 5, Ohio

Cleveland Wire Spring Co., 309 E. Main St., DeSoto, Missouri
Mechanical springs, extension springs, torsion springs, wire forms

Cleveland Worm & Gear Co., 3249 E. 80th St., Cleveland 4, Ohio
Precision gears; speed reducers; speed variators

Clevite Electronic Components Div. of Clevite Corp., 3311 Perkin Ave., Cleveland 14, Ohio
Ultrasonic transducer and phonograph-pickup elements; magnetic record-reproduce and erase heads; crystal headphones; mechanical filters

Clifford Mfg. Co., Div., Standard-Thomson Corp., 152 Grove St., Waltham 54, Mass.
Metallic bellows and diaphragms; thermostatic assemblies; packless valves

Clifton Precision Products Co., Inc., 9014 West Chester Pike, Upper Darby, Penna.
Synchros; instrument motors; servomotors; navigational computers

Climax Controls Div., see Black, Sivalls and Bryson, Inc.

Clippard Instrument Laboratory, Inc., 7390 Colerain Rd., Cincinnati 39, Ohio
Electronic apparatus and electric instruments; air cylinders

Clough-Brengle Co., 6014 Broadway, Chicago 40, Ill.
Electrical instruments, communication testing instruments

Coaxial Connector Co., 37 N. 2nd Ave., Mt. Vernon, N. Y.
Coaxial RF connectors; cable and harness assemblies; microwave components; radar and aircraft antennae; end seals; miniature connectors; electronic subassemblies

Cobehn, Inc., Passaic Ave., Caldwell, N. J.
Equipment and solvents for cleaning instruments and precision components

Cobon Plastics Corp., 41 Lafayette St., Newark 2, N. J.

Cohn Corp., Sigmund, 121 So. Columbus Ave., Mt. Vernon, N. Y.
Galvanometer suspension ribbon

Coil Winding Equipment Co., 19 Maxwell Avenue, Oyster Bay, N. Y.
Coil winding equipment; wire tension devices

Cole Co., H., 82 North High St., Columbus 15, Ohio
Surveying instruments

Coleman Engineering Co., Inc., 3500 Torrance Blvd., Torrance, Calif.
Centrifuges; analog-to-digital converters; digital readout systems; data reduction machines; oscillogram and ballistics film readers

Coleman Instrument Co., 716 So. Troost Ave., Tulsa 10, Okla.
Oscillographs

Coleman Instruments, Inc., 318 Madison St., Maywood, Ill.
Electrical measuring instruments for technical applications

Colin Campbell Co., Inc., Westville Ave., Ext., Danbury, Conn.
Transformers, custom manufactured for commercial or military application

Collectron Corp., 304 E. 45th Street, New York 17, N. Y.
Coil forms, commutators; terminal boards

Collins Corp., G. L., 2820 Hullett St., Long Beach 5, Calif.
Pressure and displacement transducers; a-c power supplies

Collins Microflat Co., 3249 W. El Segundo Blvd., Hawthorne, Calif.
Granite Surface plates

Collins Radio Co., Cedar Rapids, Iowa
Electronic apparatus

Collyer Industrial Wire Co., 245 Roosevelt Ave., Pawtuckett, R. I.
Power cables; control cables; lighting and building wire and cable

Colortone Electronics Inc., 100 Frank Road, Hicksville, L. I., N. Y. (14)
Annunciators; electronic hardware; components

Columbia Electric Mfg. Co., 4519 Hamilton Ave., N. E., Cleveland 14, Ohio
Rheostats, instruments; shunts; switchboards and special electrical equipment; motor generator sets; synchronous motors

Columbia Technical Corp., 61-02 31st Ave., Woodside 77, N. Y.
Delay lines

Colvin laboratories, Inc., 364 Glenwood Ave., East Orange, N. J.
Pressure displacement and acceleration pickups; voltage-dividing resistors; components
(See advertisement on page 151)

Comar Electric Co., 3349 W. Addison St., Chicago 18, Ill.
Relays; solenoids; switches

Combustion Control Div., Electronics Corp. of America, 1 Memorial Dr., Cambridge 42, Mass.
Combustion controls

Commercial Controls Corp., 1 Leighton Ave., Rochester, 2, N. Y.
Automatic writing machines; recorders; reproducers.

Commercial Iron Works, 2424 Porter St., Los Angeles, 21, Calif.
Blinds, spectacle type; leveling saddles; orifice fittings; orifice flanges; orifice plates
(See advertisement on page 131)

Pittsburgh & Buffalo Representative
M. S. Jacobs & Associates, Inc.
810 Noblestown Rd., Pittsburgh 5, Pa. WA-1-6140
1807 Elmwood Ave., Buffalo 7, N. Y. DE-3229

Commercial Optical Manufacturing, Inc., P. O. Box 474, Huntington, W. Va.
Optical components; low-reflection lenses

Commercial Plastics Co., 945 George St., Chicago 14, Ill.
Clamps, straps, fasteners; plastic tubing and fittings
(See advertisement on page 58)

Commercial Products Div., Aircraft Armaments Co., York Rd., Cockeysville, Md.
Microwave and r-f instruments; Conelrad

Communication Accessories Co., Lee's Summit, Mo.
Toroidal coil and transformers; filters; amplifiers; components

Communication Measurements Lab., Inc., 350 Leland Ave., Plainfield, N. J.
Testers; rectifiers; voltage regulators; communication measuring equipment

Compar Instrument Co., 455 Douglas Road, Holland, Mich.
Comparators, surface-finish microscopes and testers

Comptometer Corp., 1735 N. Paulina St., Chicago 22, Ill.
Computers; data preparation units

Computer Corp. of America, Div. of Bruno-New York Industries Corp., 460 W. 34th St., New York 1, N. Y.
Analog computers; microwave instrumentation accessories; "IDA" integro-differential analyzer; electrical and electronic instruments and components

Computer Control Co., Inc., 92 Broad St., Wellesley 57, Mass.
Special purpose computers; data handling systems; electronic control systems.
(See advertisement on page 80)

Computer Engineering Assocs., Inc., 350 N. Halstead, Pasadena, Calif.
General and special purpose direct analogy electric analog computers (DAEAC); power supplies; chopper amplifiers

Computer Instruments Corp., 92 Madison Ave., Hempstead, L. I.
Position level and dimensional instrumentation; resistors; components

Computer Measurements Corp., 5528 Vineland Ave., North Hollywood, Calif.
Computer measurements; electronic counting, timing and controlling instruments

Comtor Co., 47 Farwell St., Waltham, Mass.
Precision internal and external comparator-type diameter gages

Conant Bros. Co., 427 Riverside Ave., Medford 55, Mass.
Non-lubricated plug valves

Conant Laboratories, 6500 "O" St., Lincoln 5, Neb.
Rectifiers, copper oxide and selenium

Conax Corp., 2300 Walden Ave., Buffalo 25, N. Y.
Thermocouple glands and pressure seals

Condenser Products Co., 140 Hamilton St., New Haven, Conn.

Conduflex Corp., 201 Harrison Place, Brooklyn 37, N. Y.
Flexible conduit; conduit assemblies; fittings and couplings

Conn, Ltd., C. G., Electronics Div., 1101 E. Beardsley Ave., Elkhart, Ind.
Stroboscopes

Conn-Craft Co., 301 Fairlawn Ave., Waterbury 4, Conn.
Fabricating and engraving of plastic instrument covers; dial faces; identification markers; instruction plates; edge lighted panels

Connecticut Telephone and Electric Div., Great American Industries, Inc., Meriden, Conn.
Electronic devices

Connelly, Inc., 3154 S. California Ave., Chicago 8, Ill.
Gages and manometers; B T U indicators; H_2S testers

Conoflow Corp., 2100 Arch St., Philadelphia 3, Pa.
Control valves; pneumatic and electric actuators; pressure and liquid level transmitters; current controllers; regulators
(See advertisement on pages 151, 154, 210, 211, 215)

Conrad, Inc., 141 Jefferson St., Holland, Mich.
Test chambers

ConRay Corp., 29 W. Apple St., Dayton 2, Ohio

Consolidated Avionics Corp., 800 Shames Dr., Westbury, N. Y.

Consolidated Controls Corp., Bethel, Conn.
Jet engine temperature, speed and fuel controls; airborne pressure instrumentation; atomic power controls

Representative—Wash., Ore., Idaho, Mont.
Burt C. Porter Company
1209 Poplar Place, Seattle, Wash.
EAst 3-8330

Consolidated Electrodynamics Corp., 300 N. Sierra Madre Villa, Pasadena, Calif.
Equipment for measurement, analysis, process control, data processing, and high vacuum technology

Consolidated Electrodynamics Corp., Rochester Div., 1775 Mt. Read Blvd., Rochester 3, N. Y.
High vacuum electronic processing equipment; induction and arc furnaces; leak detectors; pumps; gages; valves; baffles

Consolidated Molded Products Co., 309 Cherry St., Scranton 2, Pa.

Consolidated Resistance Co. of America, Inc., 44 Prospect St., Yonkers, N. Y.
Resistors

Consolidated Vacuum Div.—see Consolidated Electrodynamics, Rochester Div.

Constantin & Co., L. L., Rt. 46 & Franklin Ave., Lodi, N. J.
Hermetically-sealed electrical components

Contact, Inc., Box 241, Maynard, Mass.

Continental Carbon, Div. Wirt Co., 13900 Lorain Ave., Cleveland 11, Ohio
Standard and special resistors

Continental Connector Corp., 34-63 56th St., Woodside 77, N. Y.
Miniature electronic connectors

Continental-Diamond Fibre Corp., a Subsidiary of The Budd Co., Inc.; Newark 52, Del.
Insulating materials; tubing; gears; terminal boards

Continental Electric Co., 6 N. Michigan Ave., Chicago 2, Ill.
Photocells and special purpose tubes

Continental Electric Equipment Co., Box 1055, Cincinnati 1, Ohio
Control boards and housings; electrical distribution equipment

Continental Equipment Co., Coraopolis, Pa.
Valves

Continental Foundry & Machine Co., See Copes Vulcan Div.

Continental Screw Co., 459 Mt. Pleasant St., New Bedford, Mass.
Complete line of standard, slotted, Phillips head, sheet metal, thread-cutting and special screws

Continental Sensing, Inc., 1950 N. Ruby St., Melrose Park, Ill. Thermocouple wire; thermocouples; heating elements

Continental Wire Corp., 560 Maryland Ave., York, Penna.
Insulated electrical conductors, communication and instrument hook-up wire

Control, a Div. of Magnetics, Inc., Box 391, Butler, Pa.
Reactors, components for industrial static control systems

Control Components Co., 1 Holden St., Brookline 46, Mass.
Servo amplifiers; torque motors; linear motion and velocity transducers

Control Corporation, 718 Central Ave., Minneapolis 14, Minn.
Automatic and remote control equipment

Control Data Corp., 501 Park Ave., Minneapolis 15, Minn.
Digital data processing equipment

Control Devices, Inc., 8299 Nine Mile Rd., Van Dyke, Mich.
Process-control and dimensional control instrumentation; ballistic instruments

Control Electronics Co., Inc., 10 Stepar Place, Huntington Station, L. I., N. Y.
Delay lines; filters; electrostatic memories

Control Engineering Co., 8007 Joy Road, Detroit 4, Mich.
Process timing and automatic-control devices; inspection and testing instruments; counters

Control Panel Corp., 517 W. Monroe St., Chicago 6, Ill.
Automatic control panels

Control Products, Inc., 306 Sussex St., Harrison, N. J.
Precision snap action waterproof switches and thermal switches

Control Specialists, Inc., 115 E. Arbor Vitae, Inglewood 1, Calif.
Special purpose automatic control systems for aircraft, missiles, and industrial machines and processes

Control Specialty Corp., P. O. Box 4524, Houston 13, Texas
Automatic well testing, transfer, tank switching, and well-flow controls; control panels; hermetic sealing

Controls Co. of America, 9555 Soreng Ave., Schiller Park, Ill.
Solenoids and relays; remote control equipment

Cook Electric Co., 2700 Southport Ave., Chicago 14, Ill. Research Div., 8100 Monticello Drive, Skokie, Ill.
Electrical control devices; metal bellows; vapor meters; telephone protective and distributing apparatus; aircraft instrumentation; relays; pressure switches

Cooke Optical, North Brookfield, Mass.

Cook Research Laboratories, L. H., Box 696, Menlo Park, California
Precision testing instruments for oil industry oil well cement testing equipment, combustible gas indicators, depth pressure recorders

Cooley Electric Mfg. Corp., 38 S. Shelby St., Indianapolis, 7, Ind.

Cooper Co., Clark, see Clark-Cooper

Cooper Development Corp., 2626 South Peck Rd., Monrovia, Calif.
High altitude research and instrumentation systems; telemetering and related flight and support equipment

Cooper-Hewitt Electric Co., 720-732 Grand St., Hoboken, N. J.
Ultraviolet and monochromatic light sources; quartz components; optical components

Co-Optical Mfg. Co., 1500 W. 59 St., Chicago 36, Ill.

Coors Porcelain Co., Golden, Colo.
Chemical and scientific porcelain

Cope, T. J., Division Rome Cable Corp., Third & Walnut Sts., Collegeville 22, Pa.
Instrument tubing support system; instrument tubing

Copease Corp., 425 Park Ave., New York 22, N. Y.
Photocopying equipment

Copes Vulcan Div., Blaw-Knox Co., 936 W. 26th St., Erie 4, Pa.
Automatic controllers for boilers, desuperheaters, pumps, etc; control valves

Corbett Science Labs., F. W., 3115 Venice Blvd., Los Angeles 19, Calif.
Industrial and medical; ultrasonic equipment; cardiac amplifying and indicating apparatus; graph followers and plotters

Corbin Screw Div., American Hardware Corp., New Britain, Conn. Tachometers and speedometers.

Cornell-Dubilier Electric Corp., 333 Hamilton Blvd., So. Plainfield, New Jersey
Mica, dykanol, paper, wet and dry electrolytic capacitors; vibrators; converters; antennas; printed circuitry

Corning Glass Works, P. O. Box 544, Corning, N. Y.
Tubing, blown and pressed glassware; special glasses for scientific or technical applications

Corson Electric Mfg. Corp., 540 39th St., Union City, N. J.
Capacitors

Cosa Corporation, 405 Lexington Ave., New York 17, N. Y.
Dynamometers; gas density meters; balancing machines; components

Couch Ordnance, Inc., 3 Arlington St., No. Quincy 71, Mass.
Sub-miniature rotary, shock and vibration resistant relays; rotary switches

Counter & Control Corp., 4503 W. Brown Deer Road, Milwaukee 18, Wis.
Circuit control pre-set counters with automatic recycling

Cox Instruments Div., George L. Nankervis Co., 15300 Fullerton Ave., Detroit 27, Mich.
Instruments and equipment for measurement, indication and calibration of rate of flow; filters; amplifiers

Crafts Co., Arthur A., 603 Newbury St., Boston 15, Mass.

Craig Systems, Inc., Merrimac St., Lawrence, Mass.
Cases for components during transit and storage; consoles; relay racks

Cramer Controls Corp., Centerbrook, Conn.
Western Div., 11601 Jefferson Blvd., Culver City, Calif.
Interval timers; running time meters; time switches; signal control switches; time delay switches

Crane Packing Co., 6400 Oakton St., Morton Grove, Ill.
Optical flats; monochromatic light sources

Cratex Manufacturing Co., 1600 Rollins Rd., Burlingame, Calif.
Rubberized abrasives

Crawford Fitting Co., 884 E. 140 St. Cleveland 10, Ohio
Tubing and fittings
(See advertisement on page 90)

Distributor—Metropolitan N. Y.-N. J.
R. S. Crum & Co.
860 Mountain Ave., Mountainside, N. J.
Adams 2-4444

Representative—Pittsburgh, Charleston, W. Va.
Fogleman Co., Inc.
3849 Willow Ave., Pittsburgh 34, Pa. LE-1-4005-6
400 C St., S. Charleston, W. Va. RI-4-8401

Crescent Engineering & Research Co., 5440 N. Peck Rd. El Monte, Calif.
Electromechanical transducers; control systems

Crescent Insulated Wire & Cable Inc., P. O. Box 850 Trenton 5, N. J.
Single and "cabled" air and hydraulic tubing
(See advertisement on page 20)

Representative—Pittsburgh, Charleston, W. Va.
Fogleman Co., Inc.
3849 Willow Ave., Pittsburgh 34, Pa. LE-1-4005-6
400 C St., S. Charleston, W. Va. RI-4-8401

Crest Instrument Co., 11808 S. Bloomfield Ave., Santa Fe Springs, Calif.
Corrosometer for measuring corrosion rates in lab or plant streams

Croname, Inc., 6251 Howard St., Chicago 48, Ill.
Etched, plated circuits; ceramic decorated glass; embossed pattern metal

Crosby Co., 183 Pratt St., Buffalo 5, N. Y.

Crosby Valve & Gage Co., 43 Kendrick St., Wrentham, Mass.
Safety and relief valves; gages; recorders; testers, and steam engine indicators

Crow Electri-Craft Corp., Div. of Universal Scientific Inc., 1102 Shelby St., Vincennes, Ind.

Crown Industrial Products Co., 713 Amsterdam St., Woodstock, Ill.
Electric Motor repair equipment; color code paints; design layout inks; rust inhibitors

Crucible Steel Co. of America, Box 2518, Pittsburgh 30, Pa.
Non-corrosive tubing; permanent magnets; springs; welding equipment

Crystal Glass Tube and Cylinder Co., 7310 So. Chicago Ave., Chicago 19, Ill.
Heat resisting, precision hose and other forms of tubing
(See advertisement on page 104)

Crystal Research Labs., Inc., 29 Allyn St., Hartford 3, Conn.

Capacitors; quartz products; filters; flats; frequency meters; signal generators; mirrors; oscillators; r-f. oscillators; vitreous silica; time interval apparatus; vibration pickups

Cubic Corp., 5575 Kearny Villa Rd., San Diego 11, Calif.

Cumberland Optical Co., see Atlantic Research Corp., Optical Group

Cunningham, James Son & Co., Inc., 33 Litchfield St. Rochester 8, N. Y.

Control systems; monitors; crossbar switches; solenoid actuators

California Representative
Luscombe Engineering Co.
1129 S. Fair Oaks, Pasadena, Calif. RY-1-3386
120 North "B" St., San Mateo, Calif. DI-2-7057

Cuno Engineering Co., 80 So. Vine St., Meriden, Conn.
Filters for air, gases and liquids

Curtin & Co., W. H., P. O. Box 118, Houston, Tex.
Laboratory supplies

Curtis Development & Mfg. Co., 3242 North 33rd St., Milwaukee 16, Wis.
Thermostats; terminal blocks; electrical and mechanical controls

Curtis Laboratories Inc., 2718 Griffith Park Blvd., Los Angeles 27, Calif.
Precision optical and photographic equipment, optical components and systems

Curtiss-Wright Corp., Electronics Div., 631 Central Ave., Carlstadt, N. J.
Control systems; computers; flight simulators; components

Custom Components, Inc., P. O. Box 248, Caldwell, N. J.

Customline Control Panels, Inc., 1379 East Linden Ave., Linden, N. J.
Design, fabrication, piping and wiring of instrument control panels, including pneumatic, electric, and hydraulic systems

Custom Lubricant Company, 743 Dwight Way, Berkeley 10, Calif.
Instrument lubricants; special oils

Custom Scientific Instruments, Inc., 541 Devon Street, Kearny, N. J.
Testing machines for flooring, textiles, etc.; microtomes; extensometers; thickness gages

Cuthbert Co., Inc., 502 Thorpe Bldg., Minneapolis, Minn.
Scientific grain, seed and food testing equipment

Cutler-Hammer Inc., 315 N. 12th St. Milwaukee 1, Wis.
Electric motor control; safety switches; motor driven valve operators; gas calorimeters; gas mixing and stabilizing control, resistors

Cybertronic Corp. of America, 134-8th St., Upland, Chester, Pa.
Automatic controls systems and components

Cyclohm Div., Howard Industries, 1760 State St., Racine, Wis.
Fractional-horsepower motors

Cyclone Motor Corp., 5-17 46th Rd., Long Island City 1, N. Y.

Cyclotron Specialties Co., Moraga 6, Calif.
Radioactivity equipment

D

D & B Limited, 402 Gutierrez St., Santa Barbara, Calif.
Electronic test instruments; electric wave filters; magnetic amplifiers; high-frequency alternators; motor alternators

Daco Instrument, Tillary & Prince Sts., Brooklyn 1, N. Y.
Aviation and military instruments; servomechanisms; gear heads for servo motors; gear train analyzer

Dage Electric Co., Inc., 67 N. 2nd Street, Beech Grove, Ind.
Radio frequency connectors

Dage Television Div., Thompson Products Inc., W. 10th St., Michigan City, Ind.
TV cameras; components

Dahl Co., Inc., George W., Tupelo St., Bristol, R. I.
Automatic and hand-operated control valves
(See advertisement on page 213)

Rep—W. Pa., W. Va., Md. panhdle, Ohio bdr.
Sentinel Products Co. (Wayne B. Farley)
36 Beltzhoover Ave., Pittsburgh 10, Pa.
HEmlock 1-0774

Dalgger & Co., A., 159 W. Kinzie St., Chicago 10, Ill.
Laboratory supplies

Dale Instruments Div., Electronic Development Co., 2002 N. 51st St., Omaha 4, Neb.
Electrical instruments

Dale Products, Inc., Box 136, Columbus, Nebr.
Standard resistors; production resistors; potentiometers; instrument dials and pointers; electronic assemblies; small a-c motors

Dales Co., Franklin, 180 East Mill St., Akron, Ohio

Dalmo Victor Co., Div. of Textron Inc., Belmont, Calif.
Airborne radar and microwave scanners, components and sub-assemblies; servo-hydraulics; microwaves; and aerial refueling

Dalmotor Co., 1375 Clay St., Santa Clara, Calif.
Motors; servomotors

Damol Corp., 541 Land Title Bldg., Philadelphia 10, Pa.
Automatic safety cut-off devices with alarm features for automatically-controlled process protection

Daniel Orifice Fitting Co., Inc., 8346 Union Pacific Ave., Los Angeles 23, Calif.
Orifice flowmeters and fittings; piston controlled check valves
Pittsburgh Area Representative
W. A. Stoeltzing, Inc.
940 Western Ave., Pittsburgh 33, Pa.
ALlegheny 1-9400

Daniels, Inc., C. R., Daniels, Md.
Protective textile covers for electronic instruments

Dano Electric Co., Box 709, Winsted, Conn.

Darley & Co., W. S., 2810 Washington Blvd., Chicago 12, Ill.
Pipe locators

Datascan Inc., 48 Notch Rd., Little Falls, N. J.
Delayed signal memory devices; control systems; converters, power supplies; tube testers

Datex Corp., 1307 South Myrtle Ave., Monrovia, Calif.
Digital data handling recording systems and equipment

Datran Electronics Div., Mid-Continent Mfg. Inc., 1836 Rosecrans Ave., Manhattan Beach, Calif.
Digital straingage self-balancing indicator; automatic data-logging systems; pressure transducers; servo converters

Daven Co., 530 W. Mt. Pleasant Ave., Livingston, N. J.
Attenuators; calibrating equipment for electrical instruments; resistors; potentiometers; switches

Davenport Manufacturing Co., 1713 N. Ashland Ave., Chicago 22, Ill.
Electronic and electrical test equipment

Davidson Associates, 730 Fifth Ave., New York 19, N. Y.
Centrifuges; balances; laboratory apparatus

Davidson Mfg. Co., 2223 Ramona Blvd., W. Covina, Calif.
Precision optical testing instruments; auto-collimeters; interferometers; precision divided circles; large optics

Davies Labs., Div., Minneapolis-Honeywell Reg. Co., 10721 Hanna St., Beltsville, Md.
Tape data recording and analysis components and systems for analog or digital applications

Davis Instruments Div., Davis Emergency Equipment Co., Inc., 47 Halleck St., Newark 4, N. J.
Continuous gas analysis instruments

Philadelphia Representative
Arobone and Cline
Wilford Building, 33rd & Arch Streets
Philadelphia 4, Penn. EVergreen 2-6520

Pittsburgh & Buffalo Representative
M. S. Jacobs & Associates, Inc.
810 Noblestown Rd., Pittsburgh 5, Pa. WA-1-8140
1807 Elmwood Ave., Buffalo 7, N. Y. DE-3229

Davis Regulator Co., 2541 S. Washtenaw Ave., Chicago 8, Ill.
Valves

Daystrom, Inc., 200 Elmora Ave., Elizabeth, N. J.

Daystrom Instrument Div., Archbald, Pa.

Daystrom Nuclear Div., P. O. Box 347, West Caldwell, N. J.

Daystrom Pacific Corp., 9320 Lincoln Blvd., Los Angeles, Calif.
Precision single and multi turn wire wound potentiometers; miniature and sub-miniature trimming potentiometers

Daystrom Systems Div. of Daystrom, Inc., LaJolla, Calif.
Control systems; computers; analog-to-digital converters; temperature alarm systems

Dayton Instrument, Inc., 404 Winston Ave., Dayton 3, Ohio
Analog to digital converters, pressure transducers

Daytronic Corp., 216 S. Main St., Dayton 2, Ohio
Industrial-process and dimensional control systems and components; scales; testing equipment
Philadelphia Area Representative
The I. E. Robinson Company
7404 West Chester Pike, Upper Darby, Pa.
SHerwood 8-1294, FLanders 2-7017

Dearborn Electronic Labs., Inc., 231 S. LaSalle St. Chicago 4, Ill.
Capacitors for filter applications; power supplies; filters

Dearborn Gage Co., 22038 Beech St., Dearborn, Mich.
Chromium plated gage blocks

Dearborn Glass Co., 6600 S. Harlem Ave., Bedford Park, Ill.

Dearborn Scientific Co., 1228 W. Kinzie St., Chicago 22, Ill.
Optical flats

Decker Corp., 1361 Frankford Ave., Philadelphia 25, Pa.
Dimensional, electrical and radar instrumentation

Defender Instr. & Reg. Co., Boody, Ill.
Pressure temperature and vacuum instruments; automatic controls

Defiance Engrg. & Microwave Corp., P. O. Box 488, Beverly, Mass.
Production, research and development of antennas and microwave components

Dehydrators, Inc., Tulsa, Okla.
Dehydrators, small volume for very low dewpoints
Pittsburgh Area Representative
Banks Engineering Co.
5407 Penn Ave., Pittsburgh 6, Pa.
MOntrose 1-5153 or 1-6746

DeJur-Amsco Corp., Northern Blvd. at 45th St., Long Island City 1, N. Y.
Precision single-turn potentiometers; electrical panel instruments

Del Electronics Co., 41 N. McQuesten Pkwy., Mt. Vernon, N. Y.
High voltage transformers and power supplies
(See advertisement on page 204)

Delco Appliance Div., General Motors Corp., 391 Lyell Ave., Rochester, N. Y.

Delmhorst Instrument Co., Cedar St., Boonton, N. J.
Moisture detectors

Deltron, Inc., 2905 N. Leithgow St., Phila. 33, Pa.
Regulated power supplies; control equipment

Deltronic Corp., 1507 Riverside Drive, Los Angeles 31, Calif.
Relays

Deming Indicator Co., 1616 Acorn Dr., Dayton 9, Ohio
Test indicators and dial indicators

DeMornay-Bonardi, Inc., 780 S. Arroyo Parkway, Pasadena, Calif.
Microwave test equipment and components

Denison Engineering Div., American Brake Shoe Co., 1160 Dublin Rd., Columbus, Ohio
Presses and controls, hydraulics and flow

Denison Mfg. Co., R. B., 102 St. Clair Ave., N. W., Cleveland 13, Ohio
Machine tool limit switches—snap action; one, two, and three isolated circuits, double break; Nema 12 enclosures

Denver Fire Clay Co., P. O. Box 5510, Denver 17, Colo.
Specialized industrial control equipment for power plants and processing industries; laboratory specialties

Derbyshire, Inc., F. W., 157 High St., Waltham 54, Mass.
Instrument lathes; micromills; chucks, etc
(See advertisement on page 116)

Deringer Metallurgical Corp., 8123 Monticello Ave., Skokie, Ill.
Electrical contacts; cold headed specialties

Desco Mfg. Co., 551 W. Glendale Blvd., Glendale, Calif.
Electrical inspection and testing equipment

Design & Development Labs., P. O. 696, Peekskill, N. Y.
Scientific instruments

Design Tool Corp., 80 Washington St., New York 6, N. Y.
Automatic lead formers; benders; straighteners, and tapers

Dessau Co., Maurice S., 589 5th Ave., New York 17, N. Y.
Industrial diamond tools; wheels; powder, lapping compound

Detect-O-Ray, 2622 N. Halsted St., Chicago 14, Ill.
Photoelectric counters

Detecto Scales, Inc., 540 Park Ave., Brooklyn 5, N. Y.
Scales

Detectolab, Inc., see R J Electronics

De-Tec-Tronic Corporation, 2512 N. Halsted Street, Chicago 14, Ill.
Photoelectric instruments

Detectron, see Computer Measurements

Detroit Coil Co., 2435 Hilton Rd., Ferndale 20, Mich.
Solenoids

Detroit Controls Div./Dept., American-Standard, 1650 Broadway, Redwood City, Calif.
High speed commutating switches; temperature transducers; monitoring systems

Detroit Controls Div., Military Products Dept., American Standard, 100 Morse St., Norwood, Mass.
Navigation systems, guidance equipment, gyroscopes, accelerometers, etc.

Detroit Testing Machine Co., 9390 Grinnell St., Detroit 13, Mich.
Testing machines

Deutronics, Inc., 221 N. Hermitage Ave., Trenton 8, N. J.

Deutsch Co., 6345 Regent St., Huntington Park, Calif.

Devco Engineering, Inc., Control Systems Div., Pier Lane West, Caldwell Township, N. J.
Panelboards; graphic systems; control systems; air pollution instruments; medical equipments
(See advertisement on page 86)

Development Engineering Co., 9 Cross St., Norwalk, Conn.
Environmental test equipment
(See advertisement on page 86)

Development Industries, Box 7063, Cranwood Sta., Cleveland 28, Ohio
Differential-pressure gages

Dexter Machine Products, see Camdale Precision, Inc.

DeZurik Shower Co., Sartell, Minn.
Consistency regulators; weir-type flowmeters; control valves

Pittsburgh & Buffalo Representative
M. S. Jacobs & Associates, Inc.
810 Noblestown Rd., Pittsburgh 5, Pa. WA-1-6140
1807 Elmwood Ave., Buffalo 7, N. Y. DE-3229

Dialight Corp., 60 Stewart Ave., Brooklyn 37, N. Y.
Sub-miniature indicator lights; edge lighting assemblies; pilot light assemblies for neon and incandescent lamps; oil tight, rugged indicator lights
(See advertisement on page 137)

Diamond Antenna & Microwave Corp., 7 North Ave., Wakefield, Mass.
Antennas; microwave equipment; filters

Diamond Power Specialty Corp., P. O. Box 415, Lancaster, Ohio
Industrial television; blowers; water gages and columns

Diatron Co., 5411 Pocahontas, Bellaire, Texas
Electrical and electronic instruments

Dice Co., J. W., 16 Highwood Ave., Englewood, N. J.
Testing instruments for metals; tramp metal detectors; microhm meters; electronic micrometers
(See advertisement on page 81)

Midwestern Representative
Sherertz-Henderson Co.
5707 W. Lake St., Chicago 44, Ill.
COlumbus 1-1032

Dick Co., A. B., 5700 W. Touhy Ave., Chicago 31, Ill.
Office duplicating products; photocopy equipment

Dickson Co., 7420 Woodlawn Ave., Chicago 19, Ill.
Furnace controls; chart recorders

Die-Form Circuits, Inc., 6045 West Ogden Ave., Chicago 50, Ill.
Printed molded circuits

Diehl Mfg. Co., Electrical Div. of the Singer Mfg. Co., Finderne Plant, 1116 Finderne Ave., Somerville, N. J.
A-c and d-c servomotors, d-c motor-generator sets; d-c and a-c precision tachometers; precision resolvers and phase-shifters

California Representative
Luscombe Engineering Co.
1129 S. Fair Oaks, Pasadena, Calif. RY-1-3386
120 North "B" St., San Mateo, Calif. DI-2-7057

Dielectric Products Engineering Co. Inc., Raymond, Maine
Coaxial transmission lines; fittings; harmonic filters; side band filters; coaxial switches; compressor dehydrators AM-FM and TV

Dietert Co., Harry W., 9330 Roselawn Ave., Detroit 4, Mich.
Laboratory supply house

Dietz Co., Inc., Henry G., 12-16 Astoria Blvd., Long Island City 2, N. Y.
Automatic timers; panels; switchgear; manometers; nameplates

Dietz Design and Manufacturing Co., Grandview, Missouri
Inductance components

Dietzgen Co., Eugene, 2425 N. Sheffeld Ave., Chicago 14, Ill.
Drafting and surveying instruments

Diffraction Products, Inc., 1400 S. 14th Ave., Maywood, Ill.
Diffraction gratings

Digitac, Inc., 420 S. Beverly Drive, Beverly Hills, Calif.
Electrical impulse counters

Digital Equipment Corp., Maynard, Mass.
Digital building blocks; counters; plug-in circuits and components
(See advertisement on page 80)

Digitran Co., The, 45 W. Union St., Pasadena, Calif.
Electrical and electronic components

Digitronics Corp., Albertson Ave., Albertson, L. I. N. Y.
Delay lines, perforated tape readers

Dilectron Div., Gudeman Co. of Calif., 2660 S. Myrtle Ave., Monrovia, Calif.
Ceramic capacitors; ferrites; pulse transformers; delay lines; blocking oscillators; magnetic amplifiers

Dillon & Co., W. C., 14620 Keswick St., Van Nuys, Calif.
Traction dynamometers, tensile machines, thermometers
(See advertisement on page 96)

Chicago Representative
Service Associated, Inc.
9236 S. Vincennes Ave., Chicago 20, Ill.
HIlltop 5-0555

Dimco-Gray Co., 207 E. 6 St., Dayton 2, Ohio
Plastic knobs and handles; timers and stop-clocks; snap-slide fasteners

Dinion Coil Co., P.O. Box 128, Caledonia, N. Y.

Disc Instrument Co., 12671 Bubbling Well Rd., Santa Ana, Calif.
Chart integrator kits
(See advertisement on page 239)

Disston Div., Henry, H. K. Porter Co., Inc., Philadelphia 35, Pa.
Tools; tool steel

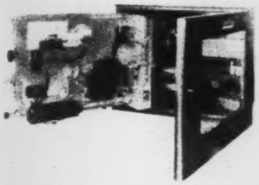


CHART INTEGRATOR

Easy to read chart presentation with counts up to 15,000 per minute. High accuracy to within 0.1% full scale. Kits available for most standard recorders, including Brown 1 sec.

DISC INSTRUMENT COMPANY
12671 Bubbling Well Road
Santa Ana, California

For more information circle 379 on inquiry card.

Distillation Products Industries, Rochester 3, N. Y.
High vacuum pumps, low vapor pressure fluids and auxiliary equipment

Dit-Mco, Inc., Electronics Div., 911 Broadway, Kansas City 5, Mo.
Universal automatic electrical circuit analyzers

Dittmore-Freimuth Co., 2517 E. Norwich Ave., Milwaukee 7, Wisconsin
Electrical instruments, counters; cable splicers; toroidal coils

Division Lead Co., 7742 W. 61st Place, Summit, Ill.
Metal & alloy products; solder; solder preforms

Dixon Inc., William, 32-42 E. Kinney St., Newark 1, N. J.
Optical and mechanical micrometers; jeweler's balances and tools; soldering irons; industrial brushes
(See advertisement on page 203)

Dmeter Manufacturing Co., Inc., 22-24 Larkin Plaza, Yonkers 2, N. Y.
Precision wire wound resistors

DoAll Company, 254 N. Laurel, Des Plaines, Ill.
Gages; Brinnell hardness testers; precision tools

Doerr Electric Corp., Cedarburg, Wis.
Motors

Dole Valve Co., 6201 Oakton St., Morton Grove, Ill.

Dollinger Corp., 11 Centre Park, Rochester 3, N. Y.
Instrument air filters

Donner Scientific Co., 888 Galindo St., Concord, Calif.
Electrical instruments and automatic-control systems; aircraft instruments; analog computers; spectrum analyzers

Doolittle Radio, Inc., 7421 Loomis Blvd., Chicago 36, Ill.
Frequency monitor

Dorber Co., 7741 W. Palatine Ave., Chicago 31, Ill.
Dissolved oxygen analyzer

Dormeyer Industries, 3418 Milwaukee Ave., Chicago 41, Ill.
Precision coils; solenoids; transformers
(See advertisement on page 178)

Dormitzer Electric & Manufacturing Co., Inc., 50 Hadley St., Cambridge, Mass.
Electrical instruments; speed control systems; light sources; relays; intercoms; electronic components

Dorr-Patterson Div. of Miller Laundry Machinery Co., 8341 Lyndon Ave., Detroit 2, Mich.
Physical testing machines

Douglas Instrument Labs., 176 Norfolk Ave., Boston 19, Mass.
Electrical and electronic instruments

Douglass Automatic Controls Co., 5949 Clara St., Bell Gardens, Calif.
Excess-temperature cut-off for hot water systems

Douthitt Corp., 650 W. Baltimore Ave., Detroit 2, Mich.
Process cameras and diaphragm control for cameras

Dow Chemical Co., Building 294E Midland, Mich.
Magnesium alloys; plastic tubing

Dow-Corning Corp., P. O. Box 592, Midland, Mich.
Silicone fluids and greases for high and low temperature lubrication of instruments; stop-cock grease; high vacuum grease; lens cement; liquid dielectrics; diffusion pump oils

Downing Crystal Co., 191 Shaffer Ave., Westminister, Md.

Minerva
TRI-TIMER

TIME STUDIES
made easier
. . . more
accurate!

Single lever controls stopwatches synchronously in rotation to time each phase of an operation . . . without interrupting work . . . without dividing attention. Also available with single "removable" stopwatch holder.

Write today for bulletin, prices.
M. DUCOMMUN CO.
580 FIFTH AVENUE, NEW YORK 36

For more information circle 380 on inquiry card.

Drafto Co., Cochranton, Pa.
Drafting machines

Drage Products, 406-32nd St., Union City, N. J.
Viscosity measurement and automatic-control equipment; cryptometers; laboratory baths

Dragon Engineering Co., P. O. Box 185, 13457 Excelsior Dr., Norwalk, Calif.
High pressure needle valves; regular and panel mounting globe valves; gage glass fittings; swage nipples; pipe fittings
(See advertisement on page 217)

Drake Manufacturing Co., 1713 W. Hubbard St., Chicago 22, Ill.
Dial & signal lights
(See advertisement on page 137)

Dressen-Barnes Corp., 250 N. Vinedo Ave., Pasadena 8, Calif.
Regulated dc power supplies; magnetic amplifiers

Dresser Products, Inc., 1050 Broad St., Providence 5, R. I.
Data processing equipment

Driaire, Inc., 132 S. Main St., South Norwalk, Conn.
Humidity and dehydration instruments and specialties

Driver Co., Wilbur B., 1875 McCarter Highway, Newark 4, N. J.
Precision alloys for electronic, electrical, mechanical, chemical applications

Driver-Harris Co., P. O. Drawer 31, Harrison, N. J.
Thermocouple and resistance wire

Drying Systems, Inc., 1800 Foster Ave., Chicago 40, Ill.

DuBois Engrg. Co., 6805 McCook Ave., Hammond, Ind.
Control panels; desks; electrical enclosures; control systems

Du-Co Ceramics Co., Box 587, Butler, Pa.
Pyrometer tubes; insulators; ceramic materials

Ducommun Co., M., 580 Fifth Ave., New York 36, N. Y.
Coil-spring stopwatches
(See advertisement on page 240)

DuKane Corp., St. Charles, Ill.
Electronic equipment; amplifiers, sound systems; intercom; audio-visual equipment

Du Maurier Co., Elmira, N. Y.
Prismatic & Galilean binoculars, telescopes; microscopes; optical benches

DuMont-Airplane & Marine Instruments, Inc., 15 William St., New York 5, N. Y.

DuMont Labs., Inc., Allen B., 750 Bloomfield Ave., Clifton, N. J.
Cathode-ray oscillographs; cathode-ray tubes, associated electronic equipment; television control; studio transmitting equipment; multiplier phototubes, signal generators

Duncan Electric Mfg. Co., Lafayette, Ind.
Ac and dc watthour meters; service and switchboard types; portable test meters, appliance meters and instrument transformers

Dunlee Corp., 4558 W. Congress St., Chicago 24, Ill.
X-ray tubes

Dunn Engineering Associates Inc., 225 O'Brien Highway, Cambridge 41, Mass.
Transistor test equipment; special test and control equipment

Duotone Co., Inc., Locust St., Keyport, N. J.

DuPont de Nemours & Co., E. I., N. W. Corner 10th & Market Sts., Wilmington 98, Del.
Fluorescent screens and chemicals

Durakool, Inc., 1010 N. Main St., Elkhart, Ind.
Mercury switches; timer relays

Duraloy Co., Scottdale, Pa.

Duramark Inc., 2 Secatoag Ave., Port Washington, L. I., N. Y.

Durant Manufacturing Co., 1914 N. Buffum St., Milwaukee 1, Wis.
Counting and measuring machines with stroke and rotary counters; lineal measuring units; predetermined, electric counters

Dusenbury, John, 271 Grove Ave., Verona, N. J.
Designers and builders of nautical instruments, and special mechanical devices

Dwyer Mfg. Co., F. W., P. O. Box 373, Michigan City, Ind.
Inclined and pointer-type draft gages; manometers; Pitot tubes; flowmeters; pressure switches
(See advertisement on page 145)

Rep.—W. Pa., W. Va., Md. Panhdle, Ohio bdr.
Sentinel Products Co. (Wayne B. Farley)
536 Beltzhoover Ave., Pittsburgh 10, Pa.
HEmlock 1-0774

Dymec, Inc., 395 Page Mill Rd., Palo Alto, Calif.
Custom instrumentation for data logging, test, and radar simulator systems; electronic counters; data conversion equipment

New York Metropolitan Area Rep.
RMC Associates
236 E. 75th St., New York 21, TRafalgar 9-2023
391 Grand Ave., Englewood, N. J., LOwell 7-3933
Philadelphia Area Representative
The I. E. Robinson Company
7404 West Chester Pike, Upper Darby, Pa.
SHerwood 8-1294, FLanders 2-7017

Dyna Empire, Inc., 1075 Stewart Ave., Garden City, L. I., N. Y.
Earphones; microphones; electronic components; jet engine parts; hydromechanical devices

Dynalysis Development Laboratories, Inc., 11941 Wilshire Blvd., Los Angeles 25, Calif.
High precision computing, instrumentation equipment

Dynamatic Div., Eaton Mfg. Co., 3307 14th Ave., Kenosha, Wis.
Variable speed drives, torque measuring equipment

Dynametrics Corp., Northwest Industrial Park, Burlington, Mass.
Force and pressure measurement equipment

Dynamic Controls Co., 1955 Massachusetts Ave., Cambridge 40, Mass.
Electronic equipment; control systems; regulated d-c supplies

Dynamic Gear Co., Inc., 20 Merrick Rd., Amityville, L. I., N. Y.
Fine-pitch instrument gears

Representative—Illinois, No. Indiana
Karl D. Engle Co.
4724 N. Sheridan Rd., Chicago 40, Ill.
UPtown 8-6363

Dynamic Instrument Co., 28 Carleton St., Cambridge 42, Mass.
Strain gage transducers
(See advertisement on page 52, 219)

Dynamic Research Co., 59 New York Ave., Westbury, L. I., N. Y.
Temperature measuring devices; null detectors; voltage comparators, servo amplifiers

Dynamics Instrumentation Co., Div. Alberhill Corp., 1118 Mission St., South Pasadena, Calif.

Instrumentation amplifiers; microvoltmeters

Dynamics Research Associates, Div., Universal Match Corp., 409 Paul Ave., Ferguson 21, Mo.
Magnetic amplifiers; control components; power supplies; inverters, converters; automatic control systems

Dynapar Corp., 5150 Church St., Skokie, Ill.
Digital electronic counters and transducers to sense, measure, and control, rate, time frequency, RPM, linear speed, or position
Representative
John T. Fuhrman, Jr.
6822 Thomas Blvd., Pittsburgh 8, Pa.
MOntrose 1-3838

E

E-C Apparatus Co., 23 Haven Ave., New York 32, N. Y.
Electroconvection apparatus; countercurrent extractors; electrophoresis paper; power supplies

EPR Special Products Corp., 675 Barbey St., Brooklyn 7, N. Y.

E S C Corporation, 534 Bergen Blvd., Palisades Park, N. J.
Delay lines; pulse transformers; radio noise filters

E-T-A Products Co. of America, 6284 North Cicero Ave., Chicago 46, Ill.
Miniature circuit breakers; starter winding relays; temperature sensitive and time delay relays; overload relays

E&W Optical Co., 2406 E. Hennepin Ave., Minneapolis 13, Minn.
Optical parts

Eagle Signal Corp., Industrial Timer Div., Moline, Ill.
Industrial control devices; traffic signal controllers and sign flashers
Pittsburgh Representative
Edgar M. Moore & Co.
6964 Thomas Blvd., Pittsburgh 8, Pa.
EMerson 1-8780

Eastern Aircraft Products Corp., Orange, N. J.
Self sealing zero leakage, quick disconnect valves

Eastern Air Devices, Inc., 385 Central Ave., Dover
Fractional-hp motors, synchronous motors
N. H.
Fractional-hp motors; synchronous motors

Eastern Etching & Mfg. Co., Grape and Front Sts., Chicopee, Mass.

Eastern Industries, Inc., 100 Skiff St., Hamden 14, Conn.
Traffic signaling devices, hydraulic pumps; hydraulic servomotors

Eastern Precision Resistor Corp., 675 Barbey St., Brooklyn 7, N. Y.
Decade boxes; heat flow instrumentation

Eastern Specialty Co., 3617 N. 8th St., Philadelphia 40, Pa.
Watthour meter testing equipment and accessories

Eastman Kodak Co., 343 State St., Rochester 4, N. Y.
Photographic equipment for laboratories, spectrographic, X-ray, etc.

Eastman Oil Well Survey Co., P. O. Box 408, Long Beach 1, Calif.
Underground surveying equipment

Eaton-Dikeman Co., Mt. Holly Springs, Pa.
Laboratory apparatus

Eaton Manufacturing Co., Reliance Div., 25 Charles Ave., S.E., Massilon, Ohio

Eberbach Corp., 200 E. Liberty St., Ann Arbor, Mich.
Laboratory apparatus

Ebert Electronics Corp., 212-26 Jamaica Ave., Queens Village 28, L. I., N. Y.
Mercury and power relays

Eby, Inc., Hugh H., 4700 Stenton Ave., Philadelphia 44, Pa.
Relays and radio parts

Eckert-Mauchly Div. Remington Rand Inc., 2300 W. Allegheny Ave., Philadelphia 23, Pa.
Computers

Eckel Valve Co., 1419 W. First St., San Fernando, Calif.
Miniature solenoid valves

Eclipse Fuel Engineering Co., Selco Instr. Div., 1100 Buchanan St., Rockford, Ill.
Flow controllers, meters, switches

Eclipse-Pioneer Div., See Bendix Aviation Corp.

Edcliff Instruments, 1711 So. Mountain Ave., P. O. Box 307, Monrovia, Calif.
Precision linear potentiometers; linear accelerometers; angle of attack-yaw meters; pendulum position indicators; precision potentiometer test equipment

Edelmann & Co., E., 2332 Logan Blvd., Chicago 47, Ill.
Automotive test instruments

Eder Instrument Co., Inc., 2293 N. Clybourn Ave., Chicago 14, Ill.
Inspection devices for internal inspection: transformer or battery powered lights; inspection rods; internal Inspectroscopes (rigid, flexible); magnifiers; mirrors; pocket microscopes
(See advertisement on page 189)

Edgerton, Germeshausen & Grier, Inc., 160 Brookline Ave., Boston 15, Mass.
Research-type cameras; xenon discharge tubes; oceanographic instruments

Edin Co., Div. of Epsco, Inc., 207 Main St., Worcester 8, Mass.
Oscillographs, amplifiers, recorders, galvanometers

Edison, Inc., Thomas A., Instrument Div., McGraw-Edison Co., West Orange, N. J.
Temperature monitoring systems for aircraft and industry; aircraft instruments: temperature indicators, pressure indicating and telemetering systems; thermal and sensitive relays; sealed thermostats; servomotors; gearheads; [illegible] control systems

Houston Representative
Process Sales Company
9802 Cliftwood St., Houston 35, Texas
PArkview 3-3710

Edmund Scientific Corp., 101 E. Gloucester Pike, Barrington, N. J.
Telescopes; microscopes; spectroscopes; optical components

Edna Lite Optical Co., Inc., 200 N. Water St., Peekskill, N. Y.

Edroy Products Co., 480 Lexington Avenue, New York 17, N. Y.
Magnifying products

Edwards Co., Inc., 90 Connecticut Ave., Norwalk, Conn.
Electrical signaling; communication equipment

Edwards, L. V., 32 Irving Place, Rockville Centre, L. I., N. Y.
Smoke-density instruments and alarms

Edward Valves, Inc., 1200 W. 145th St., E. Chicago, Ind.
Control valves

Eichner Instruments, L. C., 19 Sebago St., Clifton, N. J.

Elcor, Inc., 4235 W. North Ave., Chicago 39, Ill.
Fractional hp., geared, ungeared, synchronous, capacitor, and dc motors

Eisele & Co., 400 First Ave., N. Nashville 3, Tenn.

Eitel-McCullough, Inc., San Carlos, Calif.
Electron tubes and accessories; klystrons; traveling wave tubes

Eltzen Co., Louis C., 17 W. 60th St., New York 23, N. Y.
Extensometers, hardness, and oil testers

El Dorado Electronics Co., 2821 Tenth St., Berkeley, Calif.
Nuclear research instrumentation

El Products Corp., P. O. Box 41, Kingsbridge Station, New York 63, N. Y.
D.c. miniature motors
(See advertisement on page 126)

El Ray Motor Co., 11747 Vose St., N. Hollywood, Calif.
Miniature and fractional hp and related assemblies, including gear trains and filters; generators, inverters, and servomotors

El-Tronics, Inc., Penn Ave., Mayfield, Penna.
Nuclear and electronic instrumentation; radioactivity standards and supplies

Elco Corp., M St. below Erie Ave., Phila. 24, Pa.
Printed circuit connectors and sockets

Elcor, Inc., P.O. Box 354, Wickline Bldg., McLean, Virginia
Power transformers; d-c power supplies; amplifiers

Eldema Corp., 9844 Remer St., El Monte, Calif.
Panels, edge lighted; pilot lights

Eldorado Electronics Co., 2821 Tenth St., Berkeley, Calif.
Nuclear research instrumentation

Electronic Mechanisms, Inc., P.O. Box 1156, Greenwich, Conn.
Powdered iron clutches brakes; electromechanical amplifiers; torque controls

Electra Mfg. Co., 4051 Broadway, Kansas City 11, Mo.
Carbon resistors; W blade switches; relays; solenoids; automotive voltage regulators; ceramic disc capacitors

Electric Auto-Lite Co., Industrial Thermometer Div., Toledo 1, Ohio
Pressure and vacuum gages; speedometers; tachometers and thermometers

Electric Design & Mfg. Co., P. O. Box 237, Burlington, Iowa
Electrical indicating instruments

Electric Eye Equipment Co., 1938 E. Fairchild St., Danville, Ill.
Automatic inspection devices

Elect. Heat Control Apparatus Co., 507 Fifth Ave., Room 1066, New York 17, N. Y.
Laboratory ovens

Electric Hotpack Co., Inc., Melrose St. at Cottman Ave., Philadelphia 35, Pa.
Designers and manufacturers of controlled temperature equipment; ovens; furnaces; sterilizers; baths; constant temperature rooms for laboratories, pilot plants and plants

Electric Indicator Co., Camp Ave., Springdale, Conn.
Synchronous motors; position indicators; level controls; signaling devices

Electric Motors & Specialties, Inc., King & Hamsher Sts., Garrett, Ind.
Shaded pole motors; motor alternators

Electric Regulator Corp., Pearl St., Norwalk, Conn.
Current and frequency regulators

Electric Soldering Iron Co., Deep River, Conn.
Soldering irons, guns; solder pots

Electric Sorting Machine Div., Mandrel Industries, Inc., 3530 Eastern Ave., S.E., Grand Rapids 8, Mich.
Precision photoelectric color sorting machines; pneumatic separators

Electric Specialty Co., 175 South St., Stamford, Conn.

Electric Speed Indicator Co., 12234 Triskett Road, Cleveland 11, Ohio
Precision electric tachometers and remote position indicators; windspeed and direction instruments

Electric Switch Corp., 2320 S. Tibbs Ave., Indianapolis 41, Ind.
Metallic mercury switches

Electric Tachometer Corp., 68th and Opland Sts., Philadelphia 42, Pa.
Speed indicators and recorders; electric and mechanical counters

Electrical Industries, Inc., Div. of Philips Electronics, Inc., Murray Hill, N. J.
Glass to metal seals

Electrical Utilities Co., 2429 St. Vincent Ave., La Salle, Ill.

Electrical Windings, Inc., 2015 N. Kalmar Ave., Chicago 39, Ill.
Transformers; chokes; reactors; coils; solenoids

Electricoil Transformer Co., Westerly Rd., Ossining, N. Y.

Electrimatic Div., Marsh Corp., J. P., 3501 Howard St., Skokie, Ill.
Automatic control valves and controls; regulating valves—pressure, temperature, and electrical actuation

ElectroData Div., Burroughs Corp., 460 Sierra Madre Villa, Pasadena, Calif.
Electronic data processing systems; general purpose digital computers; magnetic tape systems; punched card systems; paper tape input/output systems

Electro Development Co., 14701 Keswick St., Van Nuys, Calif.
Sub-miniature rotary switches 1 to 3 pole, 2 to 4 gangs; slip rings, slip ring and brush assemblies; plastic products
(See advertisement on page 177)

Electro Devices, Inc., 580 Main St., Wilmington, Mass.
Semiautomatic miniature toroid coil winder

Electro Devices, Inc., 4025 Easton Ave., St. Louis 13, Mo.
Annunciators; laboratory switchboards; test equipment; power supplies; process control systems; time recorders

Chicago Representative
EPCO Services
116 S. Michigan Ave., Chicago 3, Ill.
STate 2-6486

Rep—W. Pa., Border Counties of Ohio, W. Va.
William E. Wargo Company
211 Yarrow Lane, Pittsburgh 36, Pa.
TUxedo 4-5800, 4-5801

Electro Engineering Products Co., Inc., 609 West Lake St., Chicago 6, Ill.
Instrument and servomechanism motors; signal generators, h-f apparatus

Electro Flex Heat, Inc., 83 Woodbine St., Hartford 6, Conn.
Electrical flexible heaters, plane shapes, minimum thickness, operate to 450°F; standard or custom designs for any power density, voltage, resistance

Electro Impulse Labs., 208 River St., Red Bank, N. J.

Electro Instruments, Inc., 3540 Aero St., San Diego 11, Calif.
Digital instruments; automation systems; transistorized plug-in modules

Electro Measurements, Inc., 7524 S.W. Macadam Ave., Portland 1, Oregon
C-R-L impedance bridges and accessories; rheostats; potentiometers

Authorized Sales
Representative in:
OHIO-W.PA.-W.VA.
—for—
ROCHESTER MFG. CO., Inc.
bimetal thermometers
& gauges
●
CHAS. ENGELHARD, Inc.
thermocouples
●
ENGELHARD INDUSTRIES, Inc.
gas purifiers & generators
●
ELECTRO-MECHANICAL INSTRUMENT CO.
electric meters
●
open for related lines
For fast, dependable service—call
RALPH M. NELSON
911 Marshall Bldg—Cleveland 13, O.
PHONE: CHERRY 1-4581

For more information circle 381 on inquiry card.

Electro-Mec Laboratory, Inc., 47-51 33rd St., Long Island City 1, N. Y.
Precision impedance and capacitance bridges; voltage dividers

Electro Mechanical Div., General Riveters, Inc., 785 Hertel Ave., Buffalo 7, N. Y.
Electromagnetic actuators, clutches and brakes, including miniature and subminiature

Electro Mechanical Development Co., 2337 Bissonnet, Houston 5, Texas
Customized instrumentation for geological and medical applications

Electro-Mechanical Instrument Co., 812 Chestnut St., Perkasie, Pa.
Electrical instruments

Electro Mechanical Specialties Co., Inc., 1016 N. Highland Ave., Angeles 38, Calif.
Balanced armature relays, vibration resistant, for use in airborne, missile, radar and communication applications

Electro Mechanical Research, Inc., Sarasota, Fla.
Electrical and electronic instruments and components; telemetering systems; computers

Electro Mechano Co., 261 E. Erie St., Milwaukee 2, Wis.
High-speed precision drilling machines

Electro-Medical Laboratory, Inc., South Woodstock 7, Vt.
Neurological and allied medical instruments and general electronic apparatus
(See advertisement on page 56)

Electro-Miniatures Corp., 1060 Elm Ave., Ridgefield, N. J.
Slip ring assemblies; brush assemblies; commutators; rotary switches

Electro Precision Corp., Box 668, Arkadelphia, Ark.
Servomechanisms; analog and digital system components

Electro Products Laboratories, 4501 N. Ravenswood Ave., Chicago 40, Ill.
Transducers; magnetic pickups; proximity pickup systems; dynamic micrometer; d-c power supplies

Cleveland Representative
The Fred R. Sharp Company
2138 Lee Road, Cleveland 18, Ohio
FAirmount 1-4200

Electro-Pulse, Inc., 11861 Teale Street, Culver City, Calif.
Pulse instrumentation; electronic waveform generators; automatic sweep, counter, and pulse code systems; digital indicating equipment

Electro-Snap Switch and Mfg. Co., 4218 W. Lake St., Chicago 24, Ill.
Snap action switches; subminiature and environment-free switches

Electro Switch Corp., 167 King Ave., Weymouth 88, Mass.
Switches
    Pittsburgh Representative
    Edgar M. Moore & Co.
    6964 Thomas Blvd., Pittsburgh 8, Pa
    EMerson 1-8780

Electro Tec. Corp., South Hackensack, N. J.
Slip rings; commutators; brush assemblies; selector switches; miniature relays

Electro-Tech Equipment Co., 308 Canal St., New York 13, N. Y.
Electrical and electronic parts and equipment distributor

Electro-Technical Labs., Div., Mandrel Industries, Inc., 5134 Glenmont Dr., P. O. Box 13243, Houston, Texas
Electromagnetic velocity seismometers; reflection-refraction amplifier; magnetic tape recording systems; recording oscillographs

Electro-Technical Products Div., Sun Chemical Corp., 113 E. Centre St., Nutley 10, N. J.
Insulation; custom surface and impregnated coatings; low pressure laminates

Electro-Voice, Inc., Buchanan, Mich
Audio equipment; electro-acoustic devices

Electrocon Corp., 219 Sunrise Highway West, Freeport, N. Y.
Vibration measuring instruments

Electrol, Inc., 9000 W. Pico Blvd., Los Angeles 35, Calif.
Diode function generators, punched card programming; amplifiers; chopper amplifiers; digital comparators, electrical and visual readout
(See advertisement on page 62)

Electromath Corp., 42-14 Greenpoint Ave., Long Island City 4, N. Y.

Electromotive Mfg. Co., Willimantic, Conn.

Electron-Radar Prods., 4806 W. Chicago Ave., Chicago 44, Ill.
Vacuum gages; photocells and phototubes; watthour meter testers; alarm systems; bridges; components

Electronic Apparatus Corp., 116 E. Jackson Blvd., Elkhart, Ind.
Mercury relays and switches

Electronic Associates, Inc., Long Branch Ave., Long Branch, N. J.
Analog computing equipment; variplotters; six-channel recorders; oscilloscopes; electronic digital voltmeters
(See advertisement on page 5)

Electronic Communications, Inc., 1501-72nd St., N., St. Petersburg, Fla
Electronic communications; navigations systems, components; aircraft components

Electronic Computer Div., Underwood Corp., Alberton Ave., Albertson, L. I., N. Y

Electronic Control Corporation, 1573 E. Forest Ave., Detroit 7, Mich
Flaw detectors; photoelectric controls; radiation pyrometers; torque controls; fail-safe electronic controls for machine, product, operator protection

Electronic Control Systems, Inc., 2138 Westwood Blvd., Los Angeles 25, Calif.
Automatic and remote control systems

Electronic Controls, Inc., 4521 Chestnut St., Philadelphia 39, Pa.
Electronic controllers and timers for counting, lighting, etc

Electronic Designs, Inc., 28 School St., Yonkers, N. Y.
Vacuum-tube voltmeters; precision wire-wound resistors

Electronic Development Lab., 4463 N. Harlem Ave., Chicago 31, Ill.
Electronic Apparatus

Electronic Devices, Inc., 429-12th St., Brooklyn 15, N. Y.

Electronic Engineering Associates, Ltd., 1040 Brittan Ave., San Carlos, Calif.
Dynamic pressure measuring equipment

Electronic Engineering Co., 1601 E. Chestnut St., Santa Ana, Calif.
Telemetering systems; d-c power supplies; counters

Electronic Engineering & Services Co., Inc., 104 W. Jefferson St., Falls Church, Va.

Electronic Fabricators, Inc., 682 Broadway, New York City 12, N. Y.
Plastic film capacitors

Electronic Instrument Co., Inc., 33-00 Northern Blvd., Long Island City, N. Y.
Electronic test equipment; high-fidelity kit

Electronic Mfg. Co., 140 S. Second St., Harrisburg, Pa.
Oscillators, voltmeters

Electronic Measurements Co., Inc., Lewis St. & Maple Ave., Eatontown, N. J.
A-c regulators; power amplifiers; power supplies

Electronic Measurements Corp., 280 Lafayette St., New York 12, N. Y.
Oscilloscopes; tube testers; radio and TV set analyzers; volt-ohm-milliammeters

Electronic Mechanics, Inc., 101 Clifton Blvd., Clifton, N. J.

Electronic Parts Mfg. Co., Inc., 508-25th St., Union City, N. J.
Ceramic insulators

Electronic Rectifiers, Inc., 2102 Spann Ave., Indianapolis 3, Ind
Laboratory and industrial power supplies; rectifiers

Electronic Research Associates, Inc., 67-69 E. Centre St., Nutley 10, N. J
Electrical instrumentation; transistor circuits; power supplies

Electronic Signal & Instrument Co., 139-05 Archer Ave., Jamaica 35, N. Y
Electronic scales; dynamic overweight detectors; traffic research scales; portable scales; platform scales

Electronic Specialty Co., 5121 San Fernando Blvd., Los Angeles, Calif.
Miniature relays; time delay relays; missile fuses; under and over-voltage; and under and over-frequency sensors; r-f systems and components; flashers; specialty devices

Electronic Transformer Co., 70 Washington St., Brooklyn 1, N. Y.
Fixed and adjustable transformers

Electronic Tube Corp., 1200 E. Mermaid Lane, Philadelphia 18, Pa
Amplifiers; oscilloscopes; stress-strain instruments

Electronics Corp. of America, 1 Memorial Drive, Cambridge 42, Mass.
Industrial photoelectric controls including counting equipment; electronic timers and special electronic controls; smoke controls

Electronics Development Laboratory, 336 National Rd., Dayton 3, Ohio
Catheter manometers; spark light sources

Electronics, Inc., 127 Sussex Ave., Newark 3, N. J
Gas-filled and grid-control rectifier tubes

Electrons, Inc., 127 Sussex Ave., Newark 3, N. J
Thyratron and rectifier tubes

Electropot Div., Pacific Electronic Controls Corp., 1001 South Mountain Ave., Monrovia, Calif.
Precision wirewound potentiometers, single turn, multi-turn and translatory

Electrosig Corp., 239 Main St., Stamford, Conn.
Voltage regulators; automatic timers; transformers, rectifiers; laboratory apparatus; electroplating solution testers

Electrosonic Engineering Co., 2120 Pontius Ave., Los Angeles 25, Calif.
Mercury, sensitive and subminiature relays; antennas

Electyme Motor Products Corp., River Woods Rd., Deerfield, Ill.
Clocks and timers

Elektro Serv Co., 480 Johnson Ave., Brooklyn 37, N. Y.
Electrical components

Elematic Equipment Corp., 6731 So. Chicago Ave., Chicago 37, Ill.
Pyrometers; flowmeters; thermocouples

Elgin National Watch Co., Abrasives Div., Elgin, Ill.
Watch, hair, helical, torsion and flat springs

Elgin National Watch Co., Electronics Div., 2435 N. Naomi St., Burbank, Calif.
Relays; microphones; sound powered telephones; audio equipment

Elgin Tool Works Inc., 1770 Berteau at Ravenswood Ave., Chicago 13, Ill.
Precision machine tools

Ellis Associates, Box 77, Pelham, N. Y.
Preamplifiers; strain-time recorders; calibrating equipment
(See advertisement on page 183)

Ellis & Sons Inc., G. D., 4034 N. American St., Dept. G, Philadelphia 40, Pa.
Instrument packaging

Ellison Draft Gage Co., 548 W. Monroe St., Chicago 6, Ill.
Manometers; draft gages; calorimeters; furnace control systems; portable gas analyzers; inclinometer tubes; pitot tubes; draft instruments; pitot tubes
    Pittsburgh & Buffalo Representative
    M. S. Jacobs & Associates, Inc.
    810 Noblestown Rd., Pittsburgh 5, Pa. WA-1-6140
    1807 Elmwood Ave., Buffalo 7, N. Y. DE-3229

Ellison Engineering Co., 4530 San Fernando Rd., Glendale 4, Calif.
Miniature gear heads; air-operated de-burring tool

Ellwood Ivins Steel Tube Works, Oak Lane, Philadelphia 26, Pa

Elsbert Mfg. Co., Inc., 910 W. Lake St., Chicago 7, Ill.

Elsin Electronics Corp., 617-633, Brooklyn Ave., Brooklyn 3, N. Y.
Hermetic seals

Emarco Corp., P. O. Box 615, Far Hills, Sta., Dayton 9, Ohio
Signaling system and components

Emerson & Cuming, Inc., 869 Washington St., Canton, Mass
Casting resins; foams; adhesives; microwave absorbers; impregnants; surface coatings; laminating resins

Emerson Apparatus Co., 171 Tremont St., Melrose 76, Mass
Calorimeters; material testing equipment

Emery Company, A. H., Pine St., New Cannaan, Conn
Hydraulic and pneumatic weighing systems; load cells; tank weighing equipment

    Representative—No. N. J., Met. N. Y., W. Conn
    W. C. Bellis Equipment Co.
    15 Exchange Pl., Jersey City 2, N. J.
    Delaware 3-1100

Empire Devices Prods. Corp., Amsterdam, N. Y.
High frequency apparatus

Empire Electronics Co., 74 Cortlandt St., New York 7, N. Y.
Electronic equipment distributor

Empire State Labs., 2608 Merrick Rd., Bellmore, L. I., N. Y.
Precision gear and instrument assemblies; mechanical components

Endevco Corp., 161 E. California St., Pasadena, Calif.
Dynamic measuring instrumentation; accelerometers; pressure pickups; force gages with associated electronics for indicating, telemetering and recording

Energy Kontrols, Inc., 11 South First St., Geneva, Ill
Relays; switches; combustion safeguards; humidity controls

Engdahl Enterprises, P. O. Box 823, Arcadia, Calif
Acceleration, magnetic-tape recorders

Engelhard Industries, Inc., 850 Passaic Ave., East Newark, N. J.
Industrial instruments
(See advertisement on page 21)

Engineered Electronics Co., 526 E. First St., Santa Ana, Calif.
Vacuum tube and transistorized plug-in-circuit building blocks; signal indicators; hermetically-sealed stepping switches; decade counters; DC amplifiers, supplies

Engineered Magnetics, Div. of Gulton Industries Corp., 11818 Teale St., Culver City, Calif.
Power supplies; regulators; magnetic amplifiers; frequency controls

Engineered Products Co., P. O. Box 118, Flint 4, Mich
Precision fuel nozzles, injectors

Engineering Development Labs., Inc., P. O. Box 149, Newport, R. I

Engineering Enterprises, Inc., 112 Ring Bldg., 1200 18th St., N. W., Washington 6, D. C.
Galvanometric and multi-styli recorders; printed circuit boards

Engineering Research & Development Co., see Erdco

Engineers Specialty Div., Universal Engraving & Colorplate Co., 980 Elliott St., Buffalo 9, N. Y.
Optical comparators

Engis Equipment Co., 431 S. Dearborn St., Chicago 5, Ill.
Optical, electronic, mechanical gages; tools; diamond abrasive compounds; reciprocating hand-profiler; surface finish and roundness testing.

Engler Instrument Co., 250 Culver Ave., Jersey City 5, N. J.
Time registers, controllers and recorders; hub odometers; airspeed indicators; tachometers; counters

Enley Products, Inc., 1236 Broadway, Brooklyn 21, N. Y.
Demineralizers, ion exchange resins.

Enteco Industries, Inc., 610 Kosciusko St., Brooklyn 21, N. Y.
Light filters; polarizing filters; photographic lens attachments

Environmental Equipment Co., 371 Linden St., Brooklyn 27, N. Y.
Environmental test equipment

Epic Inc., 154 Nassau St., New York 38, N. Y.
Electrical instruments; vibration and temperature instruments; optical equipment

Eppley Laboratory Inc., 12 Sheffield Ave., Newport, R. I.
Standard cells; thermopiles, pyrheliometers; golay infrared detectors; precision dc measuring instruments
(See advertisement on Inside Front Cover, 181)

Epsco, Inc., 588 Commonwealth Ave., Boston 15, Mass.
Electrical and electronic instruments; flight test instruments; digital computing equipment

Erb & Gray, 854 S. Figueroa St., Los Angeles 17, Calif.
Toolmaker's microscopes; laboratory supply house

Erco Div., ACF Industries, Inc., Riverdale, Md.
Analog computers, flight simulators, servomechanisms, electric receiver indicators, antennas

Ercona Corp., 551 Fifth Ave., New York 17, N. Y.
Optical measuring instruments; high fidelity audio equipment

Erdco Engineering Corp., Westgate Dr. and Official Rd., Addison, Ill.
Specialized equipment in electronic, chemical, and mechanical fields

Erickson Specialty Co., 10 Cayuga St., P. O. Box 141, Cohoes, N. Y.
Solenoid valves

Ericsson Screw Machine Products Co., 25 Lafayette St., Brooklyn 1, N. Y.

Erie Instromation, 12932 So. Weber Way, Hawthorne, Calif.
Counters, converters; timers

Erie Resistor Corp., 644 West 12th St., Erie, Pa.
High frequency and molded resistors; capacitors

Eriez Mfg. Co., 271 Magnet Drive, Erie, Pa.
Permanent magnets

Ertel Engineering Corp., 9 Front St., Kingston, N. Y.
Asbestos dish, filters, stainless steel filters; hard rubber filters; mixers; stainless steel pumps.

Erwood, Inc., 1770 Berteau St., Chicago 13, Ill.
Sound and vibration instrumentation

Esco Products Co., Oak Ridge Rd., Oak Ridge, N. J.
Dimensional gages and inspection equipment; optical instruments and components; light sources

Ess Instrument Co., 96 S. Washington Ave., Bergenfield, N. J.
Electronic instruments and controls

Essex Electronics, Berkeley Heights, N. J.
Inductive electronic components

Essex Wire Corp., 1600 Wells Street, Fort Wayne, Ind.

Esterline-Angus Co., Inc., P. O. Box 596, Indianapolis 6, Ind.
Electrical recording instruments, direct writing, strip chart type; pressure and vacuum recorders
(See advertisement on page 162)

Representative
Murphy & Dickey
537 S. Dearborn St., Chicago 5, Ill.
Harrison 7-7953
Territory: Illinois (Northern Half); Indiana (Counties of Lake, Porter, LaPorte, St. Joseph, Elkhart), Iowa (Counties of Dubuque, Jackson, Clinton, Scott, Muscatine, Louisa, Des Moines)

Representative—D. C., Md., Va.
The Hildenbrand Co.
P. O. Box 98, Fairfax, Va.
Crescent 3-2334

Eureka Manufacturing Co., 144 Britannia St., Taunton, Mass.

Eureka X-ray Tube Corp., 3240-58 N. Kilpatrick Ave., Chicago 41, Ill.
X-ray tubes

Evaporated Metal Films Corp., 147 E. State St., Ithaca, N. Y.
Mirrors, beam splitters

Ever Ready Thermometer Co., 88 Park Pl., New York 7, N. Y.
Calorimeters; thermometers

Everett Products, Inc., 50 Aleppo St., Providence, R. I.
Recording pens; electronic components; glass tubing

Everson Mfg. Co., 214 W. Huron St., Chicago 10, Ill.
Chemical feeders

Ewald Instruments, Box 124B, Kent, Conn.
Welding equipment—tap welding

Exact Weight Scale Co., 538 E. Town St., Columbus 15, Ohio
Over-and-under weight scales and indicators for industrial purposes; control valves and actuators

Exactel Instrument Co., 5545 Eva Ave., Los Altos, Calif.
Manometer with servo followers

Ex-Cell-O Corp., 1202 Oakman Blvd., Detroit 32, Mich.
High precision machine tools; threading and tapping tools

Excel Electric Service Co., 2113 S. Western Ave., Chicago 8, Ill.
Ground detectors; capacity relays

Excellex Electronics, Inc., 335 Van Siclen Ave., Brooklyn 7, N. Y.
Terminal blocks; metal and plastic fabricated products

Exline Engineering Co., 107 W. Second St., Tulsa 3, Oklahoma
Hydraulic, mechanical, and electromechanical instruments and controls for industry

F

F-R Machine Works, Inc., 26-12 Borough Pl., Woodside 77, N. Y.
Micro wave test equipment; R-F spectrum analyzers

Fafnir Bearing Co., 37 Booth St., New Britain, Conn.
Ball bearings

Fairbanks, Morse & Co., 600 So. Michigan Ave., Chicago 5, Ill. Electronics Div., 1115-14th Ave., East Moline, Ill.
Scales, pumps, electrical generating plants; electronic weighing systems

Fairchild Camera & Instrument Corp., Robbins Lane, Syosset, N. Y.
Aerial cameras; aerial reconnaissance systems; oscilloscope cameras; high-speed motion analysis cameras

Electrical Products Div., 110 Main St., Burlington, Vt.
Fractional-hp motors

Fairchild Controls Corp., Components Div., 225 Park Ave., Hicksville, L. I., N. Y.
Potentiometers; pressure transducers; accelerometers; air-speed and Mach computers

Fairchild Graphic Equipment, Inc., 88-06 Van Wyck Expressway, Jamaica 1, N. Y.
Electronic cameras

Fairchild Recording Equipment Corp., 154 St. & 7th Ave., Whitestone, N. Y.
Magnetic tape recorders

Falcon Alarm Co., Inc., 243 Broad St., Summit, N. J.
Liquid level indicators, recorders, controllers and alarms; process timers, fire detectors

Falcon Machine & Tool Co., Inc., 210 Concord Turnpike, Cambridge 40, Mass.
Miniature universal joints; couplings; speed reducers; running torque meters.

Falls Industries, Inc., 31945 Aurora Rd., Solon, Ohio
Graphite rupture discs and thermowells
(See advertisement on page 152)

Falstrom Co., 92 Falstrom Ct., Passic, N. J.
Steel instrument panels; panel board assemblies; cubicles; totally enclosed weather and vermin-proof instrument enclosures and steel cabinets
(See advertisement on page 19)

Fansteel Metallurgical Corp., 2200 Sheridan Rd., North Chicago, Ill.
Tantalum; tungsten; molybdenum; columbium; electrical contacts; selenium, silicon rectifiers; tantalum capacitors; special alloys.

Farmer Electric Products Co., Inc., 2300 Washington St., Newton Lower Falls, Mass.
Automatic timers; relays; switches
(See advertisement on page 164)

Farnsworth Electronics Co., 3700 E. Pontiac St., Fort Wayne 1, Ind.
Guidance, control, and support instrumentation for missiles; airborne fire control and navigation radar; special purpose tube design and production; telemetering systems

Farnsworth Electronics Co., Pacific Div., 815 S. San Antonio Rd., Palo Alto, Calif.
Hermetically sealed individual terminals; multiple headers; plugs; pressure terminals; end seals; compression seals; custom seals; rotary instrument switches

Farrand Controls, Inc., 4401 Bronx Blvd., New York 70, N. Y.
Precision optics; spectrofluorometers; grating monochromators; photometers; electron microscopes; interference-filters; alignment telescopes; infrared systems; automation positioning

Farris Engineering Corp., 400 Commercial Ave., Palisades Park, N. J.
Spring-loaded safety and relief valves

Farris Flexible Valve Corp., 436 Commercial Ave., Palisades Park, N. J.
Manually and automatically operated flexible sleeve valves

Farris Pickering Governor Co., 400 Commercial Ave., Palisades Park, N. J.
Speed regulators; pump controllers; control valves

Farris-Stacon Corp., 345 Commercial Ave., Palisades Park, N. J.
Automation controllers; valves

Fasco Industries, Inc., Motor Sales Div., P. O. Box 509, Rochester 2, N. Y.
Fractional-hp motors

Fassett Co., Inc., C. M., 21 W. Main Ave., Spokane 8, Wash.
Laboratory supplies

Fast & Co., John E., 3582 N. Elston Ave., Chicago 18, Ill.
Capacitors

Fawley-Brost Co., 111 N. Wacker Dr., Chicago 6, Ill.
Circular recording charts; inks

Fecker, J. W., Inc., 6592 Hamilton Ave., Pittsburgh 6, Pa.
Optical instruments

Federal Bearings, Inc., Poughkeepsie, N. Y.

Federal Anti-Capacity Switch Corp., P. O. Box 25, Lancaster, N. Y.
Anti-capacity switches

Federal Classifier Systems, Inc., 127 N. Dearborn St., Chicago 2, Ill.
Particle size classifiers

Federal Instrument Co., 14-02 Broadway, Long Island City 2, N. Y.
Resistors

Federal Machine & Welder Co., 1745 Overland Ave., N.E., Warren, Ohio
Resistance welding equipment

Federal Mfg. & Engrg. Corp., 211 Steuben St., Brooklyn 5, N. Y.
Microscopes

Federal Products Corp., 1144 Eddy St., Providence 1, R. I.
Precision measuring instruments

Federal Screw Products Inc., 3917 N. Kedzie Ave., Chicago 18, Ill.
Hardware for instrument manufacturing
(See advertisement on page 174)

Federal Shock Mount Corp., Div. of The Korfund Co., 1060 Washington Ave., New York 56, N. Y.
Vibration isolators; shockmounts; mounting bases

Federal Telephone and Radio Co., ITT Components Div., 100 Kingsland Road, Clifton, N. J.
Radio transmitting and direction finding equipment; transmitting tubes; field intensity meters

Federal Tool Engrg. Co., 1384 Pompton Ave., Cedar Grove, N. J.
Welding machines, and accessories; automatic circuit assembly machines

Federated Metals Div., American Smelting & Refining Co., 120 Broadway, New York 5, N. Y.
Solders; fluxes; lead shielding

Feedback Controls, Inc., 899 Main St., Waltham 54, Mass.
Electrical and electronic instruments; control systems; computers

Feiler Engineering & Manufacturing Co., 8026 N. Monticello Ave., Skokie, Ill.
Electrical instruments

Fellows Gear Shaper Co., 78 River Rd., Springfield, Vt.
Gear checking machines; involute measuring machines

Felsenthal & Sons, C., 3500 N. Kedzie Ave., Chicago 18, Ill.
Radio and TV; refrigeration; computers and navigation instruments.

Femco, Inc., Box 32, Irwin, Pa.
Carrier current communications; wired audio system; transmission of multiple controls and indications with carrier current or coded pulses

Fenwal Inc., Leland St., Ashland, Mass.
Industrial thermostats; temperature alarm systems, incl. bearing; aviation instruments, ground

Charlotte, N. C. Representative
W. K. Hile Co.
1110 E. Morehead St., Charlotte 7, N. C.
Franklin 7-5062

Fenway Machine Co., 3107 North Broad St., Philadelphia 32, Pa.
Drilling and drill grinding machines; power supplies; automatic nibblers

Ferguson Co., 814 Ridgely St., Baltimore 30, Md.
Laboratory supply house

Ferner Co., R. Y., 110 Pleasant St., Malden 48, Mass.
Precision Instruments

Ferranti Electric, Inc., 30 Rockefeller Plaza, New York 20, N. Y.
Control systems; automatic telegraphy; transformers

Ferrara, Inc., 8106 W. 9 Mile Rd., Oak Park 37, Mich.
Control panels for machine tools; electrical and electronic control systems; liquid level controllers; electronic timers; electronic counters

Ferrier Engineering, 24 Benton St., Springfield, Mass.
Special instruments; test stands for automatic and diesel industries

Ferris Instrument Co., Boonton, N. J.
Laboratory and production testing equipment; radio noise and field strength meters and special electrical instruments

Fidelitone, Inc., 6415 Ravenswood Ave., Chicago 26, Ill.
Instrument pivots and contacts

Fidelity Machine Co., 3906 Frankfort Ave., Philadelphia, Pa.
Abrasion testers

Fielden Instrument Div., see Aeronautical and Instruments Div., Robertshaw-Fulton Controls Co.

Film Capacitors, Inc., 337 E. 139 St., New York 54, N. Y.
Fixed and variable capacitors

Filtors, Inc., 30 Sagamore Hill Dr., Port Washington, L. I., N. Y.
Subminiature relays

Filtron Co., Inc., 131-15 Fowler Ave., Flushing 55, L. I., N. Y.

Fineisen, A. R., 114-102 230th St., Cambria Heights, L. I. 11, N. Y.
Precision drilling and nutting machines; crystal electrodes; conductive paints; drill heads; hobs for fine pitch gears

Finn & Co., Inc., T. R., 200 Central Ave., Hawthorne, N. J.
Shock and vibration control equipment

Fischer & Porter Co., 775 Warminster Rd., Hatboro, Pa.
Industrial process instrumentation; water chlorination equipment; precision glass products; data-handling equipment

Fish-Schurman Corp., 68 Portman Rd., New Rochelle, N. Y.
Scientific instruments; optical, technical and scientific glass and porcelain
(See advertisement on page 89)

Fisher Governor Co., Box 307, Marshalltown, Iowa
Gas distribution system instruments; level indicators; recorders; transmitters; pressure controllers; control valves; regulators; telemetering systems
(See advertisement on page 9)

Fisher Co., Inc., Oscar, 5th Ave. & S. Plank Rd., Newburgh, N. Y.
Porous metal filters; jacketed fittings

Fisher-Pierce Co., 170 Pearl St., South Braintree, Mass.
Photoelectric controls; relays; timers

Fisher Radio Corp., 21-21-44 Drive, Long Island City 1, N. Y.

Fisher Research Laboratory 1961-63-65 University Ave., Palo Alto, Calif.
Electromagnetic metal pipe and cable locators; sound leak detectors; pipe and sound detecting instruments; Geiger and scintillation counters

Fisher Scientific Co., 717 Forbes St., Pittsburgh 19, Pa.
Laboratory appliances and reagent chemicals

Fitzpatrick Electric Supply Co., 411 Irwin St., Muskegon, Mich.
Ductile bismuth wire

Fleetwood Labs., Inc., 300 Victory Blvd., New Rochelle, N. Y.
X-ray thickness gages; relay test sets

Flexaust Co., 100 Park Ave., N. Y. 17, N. Y.
Flexible hose, duct, and tubing

Flexonics Corp., 1309 S. Third Ave., Maywood, Ill.
Flexible metallic tubing; hose assemblies; straight and formed tubing; bellows, expansion joints

Flight Research Inc., P. O. Box 1-F, Richmond 1, Va.
Photographic data recording instruments; automatic photographic exposure controllers; aircraft instruments; single crystal silicon

Flodar Corp., 16911 St. Clair Ave., Cleveland 10, Ohio
Metal, plastic, and rubber fittings

Flow Corp., 85 Mystic St., Arlington 74, Mass.
Hot wire anemometers, micromanometers; electronic instruments; probes; metal crystals
(See advertisement on page 94)

Fluidal Valves, Inc., 3372 Lime Ave., Long Beach 7, Calif.
Piston type valves

Pittsburgh & Buffalo Representative
M. S. Jacobs & Associates, Inc.
850 Noblestown Rd., Pittsburgh 5, Pa. WA-1-6140
1807 Elmwood Ave., Buffalo 7, N. Y. DE-3229

Flow Actuated Control Co., Inc., 21 Park Row, New York 38, N. Y.
Process control systems; flow controllers

Fluke Mfg. Co., Inc., John, 1111 W. Nickerson St., Seattle 99, Wash.
Electrical and electronic instruments; power supplies

Fluor Corp., Ltd., Box 7030 East L. A. Branch, Los Angeles 22, Calif.
Pressure snubbers and pulsation dampers

Fonda Gage Inc., 200 Henry St., Stamford, Conn.
Gage blocks

Food Technology, Inc., 5903 NW Highway, Chicago 31, Ill.
Temperature and humidity chambers; testing apparatus

Force & Co., Wm. A., 216 Nichols Ave., Brooklyn 8, N. Y.

Ford Engineering Co., see Daystrom-Pacific

Ford Instrument Co., Div. of Sperry-Rand Corp., 31-10 Thomson Ave., Long Island City 1, N. Y.
Analog and digital computers; navigational, weapons control systems and equipment

Formica Co., Subsidiary of American Cyanamid, 4620 Spring Grove Ave., Cincinnati 32, Ohio
Laminated plastic (formica) rods, sheets and tubes

Forro Scientific Co., 833 Lincoln St., Evanston, Ill.
Laboratory, industrial-process, dimensional, and nuclear instrumentation, components

Foster Engineering Co., 835 Lehigh Ave., Union, N. J.
Control valves; flow tubes; regulators; relief valves
(See advertisement on page 216)

Foto Video Labs., Inc., 36 Commerce Rd., Cedar Grove, N. J.
Television, industrial; video amplifiers; line amplifiers

Western Representative
Peninsula Associates
1245 Hancock St., Redwood City, Calif. EM-9-1226
3215 Western Ave., Seattle, Wash. AT-4-1840

Fox Valley Instrument Co., Route 1, Highway 27, Cheboygan, Mich.
Industrial and automatic service instruments

Foxboro Co., 468 Neponset Avenue, Foxboro, Mass.
Instruments for the measurement and control of industrial process variables
(See advertisement on pages 30, 31)

Frangible Discs, Inc., 57 Railroad Ave., Penns Grove, N. J.
Safety discs; fuse plugs

Franklin Electronics Inc., East 4th St., Bridgeport, Penna.
Instrumentation and data reduction equipment; mobile broadcast receivers f.m.

Franklin Mfg. Co., A. W., 175 Varick St., New York 14, N. Y.

Fraser Development Laboratory, P. O. Box 73, Huntington Station, N. Y.
Fluxometer for measuring magnetic flux in gauss

Frederick and Associates, Carl L., 4630 Montgomery Ave., Bethesda 14, Md.
Technical reference service

Fredericks Co., George E., Ann St. & Philamont Rd., Bethayres, Pa.
Glass instruments and apparatus

Freed Inc., J. Melvin, Perkasie, Pa.
Flat glass products

Freed Transformer Company, Inc., 1718 Weirfield St., Brooklyn 27, N. Y.
Transformers; reactors; filters; magnetic amplifiers; toroid inductors; laboratory test equipment; electronic counters
(See advertisement on pages 70, 206)

Fretco Incorporated, see Semi-Elements Inc.

Frick Co., Waynesboro, Pa.
Float valve controls; electric controls; refrigerating and air conditioning machinery

Friden Inc., 2350 Washington Ave., San Leandro, Calif.
Automatic calculators; adding machines; automatic billing machines; integrated data processing equipment; automatic writing and composing machines

Friedrich & Dimmock, Inc., Lincoln Ave., Millville, N. J.
Laboratory apparatus

Friez Instrument Div., Bendix Aviation Corp., Towson 4, Md.
Temperature and humidity controls; gas and stoker controls; damper motors; electrical relays; temperature and humidity indicators and recorders; psychrometers; draft gages; anemometers; CO_2 analyzers

Fruengel Inc., Frank, Broadmoor Drive, Dayton 9, Ohio
Electrical and electronic test instruments; stroboscopes

Fuller Co., 124 Bridge St., Catasauqua, Pa.
Bulk material level controllers and control panels

Fulton Sylphon Div., Robertshaw-Fulton Controls Co., Box 400, Knoxville 1, Tenn.
Temperature, pressure, vacuum, regulators and controls

Rochester, New York Distributor
Nickles Engineering Company
850 Linden Ave., Rochester 10, N. Y.
LUdlow 6-4988

Furnas Electric Co., 1134 McKee St., Batavia, Ill.
Electric motor controls and starters; pressure, limit switches

Furst Electronics, Inc., 1938 E. Fairchild Ave., Danville, Ill.
Power supplies; amplifiers; bridges

Fusite Corporation, 6000 Fernview Ave., Cincinnati 13, Ohio
Hermetic terminals

Futurecraft Corp., 1717 North Chico Ave., El Monte, Calif.
High pressure pneumatic, liquid oxygen and corrosive liquid solenoid valves; regulators

G

G & G Precision Works, Inc., 5-33 Forty-eighth Ave., Long Island City 1, N. Y.
Mechanical optical and electrical precision instruments

G-M Laboratories, Inc., 4300 N. Knox Ave., Chicago 41, Ill.
Servo motors; motor generators; tachometers
(See advertisement on page 98)

G. M. Mfg. Co., 50 W. 3 St., New York 12, N. Y.
G. P. S. Instrument Co., Inc., 811 Boylston St., Boston 16, Mass.

GPE Controls Inc. (formerly Askania Regulator Co.), 240 E. Ontario St., Chicago, Ill.
Automatic control instruments, servo valves

GPS Instrument Co., Inc., 180 Needham St., Newton 64, Mass.
High-speed analog computers; computer engineering service

G. R. S. Corp., 6533 N. Olmstead Ave., Chicago 31, Ill.

G-V Controls Inc., 28 Hollywood Plaza, East Orange, N. J.
Relays; switches

Gabriel Electronics Div., Gabriel Co., 135 Crescent Rd., Needham Heights 94, Mass.
Communications; microwave; radar antennas; drive pedestals and controls

Gadgets, Inc., 3629 N. Dixie Drive, Dayton 4, Ohio
Airborne and ground instruments; testing chambers

Gaertner Scientific Corp., 1208 Wrightwood Ave., Chicago 14, Ill.
Precision, scientific, optical, and measuring instruments for use in industrial, research, educational and gage laboratories; inspection and tool and die departments

Gage Co., 29 N. McCamly St., Battle Creek, Mich.
Charts, gages, features for optical comparators, profile gages.

Galland-Henning Mfg. Co., Nopak Div., 2753 S. 31st St., Milwaukee 46, Wis.
Air and hydraulic valves and cylinders

Gallien & Son, R. P., 220 W. 5th St., Los Angeles 13, Calif.
Instrument lathes and tools

Gamewell Co., 1238 Chestnut St., Newton Upper Falls 64, Mass.
Precision potentiometers

Gap Instrument, 33 S. Grove St., Freeport, L. I., N. Y.
Gap step transmission systems; mechanical integrators; differentials

Gar Electrical Instrument Corp., 92-15 172nd St., Jamaica, L. I., N. Y.

Gar Precision Parts, Inc., 190 Henry St., Stamford, Conn.
Precision metal tubing, fittings, flow nozzles

Garde Manufacturing Co., 588 Eddy St., Providence 3, R. I.
Insulated terminals; terminal boards; allied components

Garden City Instruments, Inc., 931 Sherman Ave., Evanston, Ill.
Temperature and humidity instruments

Gardner Laboratory, Inc., 5521 Landy Lane, Bethesda 14, Md.
Testing instruments

Gardner Pad Co., Inc., River St., Wolfeboro, N. H.

Garlock Packing Co., 402 Main St., Palmyra, N. Y.
Mechanical packings; gaskets, plastic products

Garlynn Engineering Co., 755 Pennsylvania Ave., San Francisco 7, Calif.
Hydrological and surveying instruments

Gas Appliance Specialties Co., 32-37 56th St., Woodside, New York, N. Y.
Gas regulators

Gast Mfg. Corp., Box 117, Benton Harbor, Mich.
Vacuum pumps

Gates & Co., Inc., Geo. W., Hempstead Pike & Lucille Ave., Franklin Square, L. I., N. Y.
Visible and ultraviolet light sources

Gates Electronic Co., 2090 Barnes Ave., New York 62, N. Y.
D-c power supplies and dc test equipment for electroplating equipment
(See advertisement on page 162)

Gates Mfg. Co., Quincy, Ill.

Gatti, Inc., Aurele M., 524 Trndall Ave., Trenton 9, N. J.
Mounted or unmounted sapphire and ruby bearings for instruments; special shape sapphire wearparts
(See advertisement on page 173)

Gaydon Co., 561-2946 Killington, Western Springs, Ill.
Automatic controllers; alarm systems

Gear Supply Co., 880 El Camino Real, Belmont, Calif.
Gears; splines; machined components; gear assemblies

Geartronics Corp., 50 Nashua St., Woburn, Mass.
Gears, gear systems

Geier & Bluhm, Inc., 594 River St., Troy, N. Y.
Spirit levels, mounted, unmounted; cohesion testers; specialized inclinometers; instrument parts
(See advertisement on page 114)

Gelber & Sons, Inc., S., 5806 N. Lincoln Ave., Chicago 45, Ill.
Balancing machines; pumps

Gem Instrument Mfg. Co., 6523 Euclid Ave., Cleveland 3, Ohio
Dial indicators

Gems Company, 85 Market St., Newington, Conn.
Flow, level, and pressure sensing devices
Pittsburgh Area Representative
Banks Engineering Co.
5407 Penn Ave., Pittsburgh 6, Pa.
MOntrose 1-5453 or 1-6746

Genales, Andres, 29 Second Ave., Nyack, N. Y.
Toolroom test indicators

General Alloys Co., 405 W. First St., Boston 27, Mass.

General Aniline & Film Corp., 270 Park Ave., New York 17, N. Y.

General Automatic Corp., 12 Carlton Ave., Mountain View, N. J.
Electromagnetic relays

General Automation Corp., 40-66 Lawrence St., Flushing 54, N. Y.
Powerpress and brake controls; ultrasonic cleaners

General Biological Supply House, Inc., 8200 S. Hoyne, Chicago 20, Ill.
Biological laboratory supplies

General Bronze Corp., 711 Stewart Ave., Garden City, L. I., N. Y.
UHF waveguide systems; waveguide test components; radar, scatter communications; radio telescope antennas and systems

General Cement Mfg. Co., 919 Taylor Ave., Rockford, Ill.
Switches; cement tester; spark plug tester

General Ceramics & Steatite Corp., Keasbey, N. J.
Ceramic bushings and coil forms; hermetic seals

General Chemical Div., Allied Chemical & Dye Corp., 40 Rector St., New York 6, N. Y.

General Communication Co., 677 Beacon St., Boston 15, Mass.
Precision electronic equipment; electronic engineering services

General Control Co., 1200 Soldiers Field Rd., Boston 34, Mass.
Electrical switches; control units; timers

General Controls Co., 801 Allen Ave., Glendale 1, Calif.
Automatic pressure, temperature, level and flow controls
(See advertisement on Back Cover)

General Crystal Co., Burlington, Iowa

General Devices, Inc., P. O. Box 253, Princeton, N. J.
Remote-control systems; flight-test equipment; switches

General Electric Co. (GE), 1285 Boston Ave., Bridgeport 2, Conn.
Rectifiers and switches

General Electric Co. (GE), Apparatus Sales Div., 1 River Rd., Schenectady 5, N. Y.
(See advertisement on Front Cover)

General Electric Co. (GE), Cathode Ray Tube Dept., Bldg. 6, Electronics Park, Syracuse, N. Y.

General Electric Co. (GE), Chemical & Metallurgical Div., 1 Plastics Ave., Pittsfield, Mass.
Silicone materials

General Electric Co. (GE) Clock & Timer Dept., Ashland, Mass.

General Electric Co. (GE) Components Dept. (or Div.) See GE Electronic Components Div.

General Electric Co. (GE) Construction Materials Div., 1285 Boston Ave., Bridgeport 2, Conn.

General Electric Co. (GE) Electronic Components Div., Owensboro, Ky. See also GE Power, Receiving, Cathode Ray Tube Depts.; Semi Conductor Prods. Dept.; Specialty Electronic Components Dept.

General Electric Co. (GE), Electronics Div., Electronics Park, Syracuse, N. Y.
Oscillographs; tube analyzers; frequency instruments and crystals; nuclear measuring instruments; power supplies, closed circuit television

General Electric Co. (GE) General Purpose Control Dept., Bloomington, Ill.
Industrial motor control

General Electric Co. (GE), Instrument Dept., 40 Federal St., West Lynn, Mass.
Electrical and electronics instruments; industrial-process instruments and components; aviation instruments; laboratory instruments
Cleveland Representative-Sales & Service
Christie Laboratories, Inc.
616 St. Clair Ave., NE, Cleveland 14, Ohio
CHerry 1-0505

General Electric Co., (GE) Laminated Products Dept., Coshocton, Ohio

General Electric Co., (GE), Lamp Div., Nela Park, Cleveland 12, Ohio
Incandescent and glow lamps

General Electric Co. (GE), Lamp Wire and phosphors Dept., 1331 Chardon Rd., Cleveland 17, O.
Tungsten, molybdenum and cathode ray tube phosphors; tungsten and molybdenum products available as powder, rod, wire, sheets, and fabricated parts

General Electric Co. (GE), Low Voltage Switchgear Dept., Rectifier Plant, Lynchburg, Va.
Battery chargers; power supplies for computer, aircraft, military, special, heavy and light industrial applications

General Electric Co. (GE), Metallurgical Products Dept., 11177 E. 8 Mile Rd., Detroit 32, Mich.
Carboloy cemented carbides; Alnico permanent magnets

General Electric Co. (GE), Power Tube Dept., Bldg. 267, Schenectady 5, N. Y.

General Electric Co. (GE), Receiving Tube Dept., Owensboro, Ky.

General Electric Co. (GE), Semi Conductor Prods. Dept., 1224 W. Genesee St., Syracuse, N. Y.
Authorized Distributor
Pioneer Electronic Supply Corp.
2115 Prospect Ave., Cleveland 15, Ohio
SUperior 1-9410

General Electric Co., (GE) Silicone Prods. Dept., Mechanicville Rd., Waterford, N. Y.

General Electric Co. (GE), Specialty Controls Dept., Waynesboro, Va.
Control systems; servomechanisms, relays

General Electric Co., (GE) Specialty Electronic Components Dept., 1811 LeMoyne Ave., Syracuse, N. Y.
Potted circuits; magnetic displacement pickups; number discs; preamplifiers; dielectric materials

General Electric Co. (GE), Textolite Dept., Coshocton, Ohio

General Electric Co. (GE), Tube Dept. See GE Power, Receiving, Cathode Ray Tube Depts., also Semi Conductor Prods. Dept.; Specialty Electronic Components Dept.

General Electric (GE), X-Ray Dept., 4855 Electric Ave., Milwaukee 1, Wis.
Medical, dental and industrial X-ray apparatus, accessories and supplies

General Hermetic Sealing Corp., 99 East Hawthorne Ave., Valley Stream, L. I., N. Y.
Control systems; hermetic seals and bushings

General Industries Co., Elyria, Ohio
Electric motors for phonographs, gear trains; a-c and d-c voltage.

General Etching & Mfg. Co., 3070-3082 W. Grand Ave., Chicago 22, Ill.

General Industries Co., Elyria, Ohio
Fractional-hp motors

General Instrument Co., Box 7154, Indianapolis 18, Ind.
Automatic control systems; electrical and mechanical instruments

General Instrument Corp., F. W. Sickles Div., P. O. Box 330, Chicopee, Mass.

General Laboratory Supply Co., P. O. Box 2607 Paterson, N. J.
Laboratory apparatus and supplies

General Magnetic Corp., 1001 Erwin Ave., Detroit 34, Mich.

General Magnetics, Inc., 135 Bloomfield Ave., Bloomfield, N. J.
Magnetic modulators; amplifiers; voltage regulators; servo control systems

General Motors Corp., Delco Appliance Div., 391 Lyell Ave., Rochester 1, N. Y.
(See advertisement on page 45)

General Mills, Inc., Mech. Div., 1620 Central Ave., Minneapolis 13, Minn.
Industrial, aircraft, testing and military instruments; telemetering and control systems

General Photo Products Co., Inc., General Photo Bldg., Chatham, N. J.
Dry and wet photocopy equipment and supplies

General Physical Laboratory, 509 Fifth Ave., New York 17, N. Y.
Special light sources

General Plastics Corp., 165 Third Ave. at E 26th St., Paterson, N. J.
Printable instrument tape and wire markers; spray coatings; impregnated electrical tubing

General Plate Div., Metals & Controls Corp., Attleboro, Mass.
Solid and clad, precious and base metals; thermostat metals; electrical contacts; industrial metals

General Precision Lab., Inc., 63 Bedford Rd., Pleasantville, N. Y.
Airborne navigation systems; broadcast, industrial, institutional and military television equipment

General Radio Co., 275 Massachusetts Ave., Cambridge 39, Mass.
Oscillators; impedance standards and measuring equipment; voltmeters; motor controls; stroboscopes

General Regulator Corp., 666 Fifth Ave., New York 19 N. Y.
Electric and pneumatic combustion control systems; steam desuperheaters; hydraulic control systems for aircraft test facilities

General Resistance, Inc., 577 E. 156th St. New York 55, N. Y.
Networks, matching and pulse forming; resistors
Philadelphia Area Representative
William R. Scholes
P. O. Box 104 Cheltenham, Penna.
PIlgrim 5-2765

General Rubber Corp., Tenafly, N. J.
Rubber expansion joints, pipe and fittings.
Pittsburgh Representative
Forbes-Western, Inc.
940 Western Ave., Pittsburgh 33, Pa.
ALlegheny 1-9400

General Scientific Corp., 5151 West 65th St., Chicago 38, Ill.
Lenses; mirrors; optical parts & systems; photoelectric cells

General Scientific Div., Columbia Machine & Die Co., 12017 Vose St., North Hollywood, Calif.

General Scientific Equipt. Co., 2700 W. Huntington St., Philadelphia 32, Pa.
Automatic water stills; laboratory instruments and accessories

General Test Equipment Co., 101 Windsor Pl., Syracuse 10, N. Y.
Pen size radio signal source; special apparatus

General Tire & Rubber Co., Wabash, Ind.
Shock mountings

General Transformer Co., 18240 Harwood Ave., Homewood, Ill.

General Transistor Corp., 91-27 138th Place, Jamaica 35, L. I., N. Y.
Transistors; rectifiers; diodes; transistor test sets

General Tungsten Mfg. Co., Inc., 502-23rd St., Union City, N. J.

General Ultrasonics Co., 67 Mulberry, Hartford 8, Conn.
Ultrasonic equipment; instrument cleaning equipment

Genisco Inc., 2233 Federal Ave., Los Angeles 64, Calif.
Precision test equipment; centrifuges; vibration equipment, oscillating tables; accelerometers; pressure pickups

Genzlinger, Inc., R. G., Neshaminy, Pa.
Amplifiers; control systems; ultrasonic equipment

Geophysical Instrument Co., Div. Georator Corp., Manassa, Va.
Electrical and electronic balances; radioactivity instrumentation

Georator Corporation, Manassas, Virginia
Geophysical instruments; ac and dc generators

George Agency, New Hall, Calif.
Microscope Matrices
Eastern United States Rep
Hoffman Engineering Corp.
183 R Sound Beach Ave.
Old Greenwich, Conn. NEptune 7-3557

Geotechnical Corp., P. O. Box 28277, Dallas 28, Texas
Manufacturers of instruments and components for geophysical, industrial and research applications
(See advertisement on page 175)

Gerber Scientific Instrument Co., 162 State St., Hartford 1, Conn.
Analog computers; computing scales

Gerin Corp., P. O. Drawer 307, Avon, N. J.
Lube oil testing kits

Germanow-Simon Machine Co., Inc., 408 St. Paul St., Rochester 3, N. Y.
Gages; instruments; household and industrial dial-type thermometers; die making machines; surface grinders

Gertsch Products Inc., 3211 So. La Cienega Blvd., Los Angeles 16, Calif.
Frequency standards; frequency meters; filters; voltage dividers; vacuum tube voltmeters

Giannini & Co., G. M., 918 E. Green St., Pasadena 1, Calif.
Airborne transducers; gyro instruments; air data computers; digital data recording systems; industrial automation equipment; precision potentiometers; stepping motors

Gibson Electric Co., Box J528, Delmont, Penna.
Electrical contacts of silver, silver alloys; palladium; nickel; of tungsten, copper, molybdenum, cadmium-oxide, graphite, tungsten-carbide

Gilbert & Barker Mfg. Co., West Springfield, Mass.
Tank gages; automatic samplers; pumps

Gilman Engineering & Mfg. Corp., 300 W. Eastern Ave., Janesville, Wis.

Gilmore Industries, Inc., 13015 Woodland Ave., Cleveland 20, Ohio
Measuring systems; data handling systems
(See advertisement on page 154)

Gisholt Machine Co., 1245 E. Washington Ave., Madison 10, Wis.
Balancing machines; manual or automatic turret lathes; single spindle automatic lathes; superfinishing machine

Gits Bros. Mfg. Co., 1846 S. Kilbourn Ave., Chicago 23, Ill.
Lubricating devices; mechanical shaft seals

Glass Engineering Laboratories, Inc., 601 O'Neill Ave., Belmont, Calif.
Laboratory apparatus; ultra-speed centrifuges; heat exchangers

Glass Instruments, Inc., 2285 E. Foothill Blvd., Pasadena, Calif.
Technical glassblowing; scientific glass instruments; glass-to-metal sealing; laboratory apparatus

Glass Products Co., 6911 S. Chicago Ave., Chicago, Ill.

Glass Specialty Co., 600 Schenck Ave., Brooklyn 7, N. Y.
Glass cutting to specification; lenses, gage and cover glass

Glass-Tite Industries, Inc., 88 Spectacle St., Cranston 10, R. I.
Hermetic seals for headers, terminals, relays; transistor and crystal bases

Gleason-Avery Inc., 45 Aurelius St., Auburn, N. Y.
Fractional hp motors

Glenco Corp., See Gulton Industries

Glengarry Equipt. Corp., Bay Shore, N. Y.

Glo-Brite Products, Inc., 6417 N. California Ave., Chicago 45, Ill.

Globe Electrical Mfg. Co., 1729 W. 134th St., Gardena, Calif.
Relays: control, current, frequency, power, etc.

Globe Industries, Inc., 1784 Stanley Ave., Dayton 4, Ohio
Aircraft instrument testing equipment; aircraft interval timing instruments; aircraft photo equipment; automatic control instruments
Tech-Reps—Northern Calif., Western Nev.
Long & Associates
1210 Canterbury Dr., Burlingame, Calif.
DIamond 3-8537

Globe Phone Mfg. Corp., 2 Linden St., Reading, Mass.
Pipe locating equipment; leaky valve locators; hearing aids; secret phone or listening equipment for government investigating agencies

Globe Tool & Engrg. Co., 5051 Kitridge Rd., Dayton 4, Ohio
Dynamic balancing equipment

Glogau & Co., Inc., 1912 W. Birchwood, Chicago 26, Ill.
Calipers

Glowmeter Corp., 37 Franklin St., Buffalo 2, N. Y.
Condensed indicating warning system with quantitative displays; qualitative warning signal system; alarm-signal photorecorder

Goe Engineering Co., Box 22004, 219 S. Mednik Ave., Los Angeles 22, Calif.
Terminal lugs; panel handles; insulated feed-thrus; insulated standoffs; shaft locks

Goerz American Optical Co., C. P. 461 Doughty Blvd., Inwood 96, N. Y.
Photographic lenses, optical prisms and flats, and other optical units to specification
(See advertisement on page 129)

Gold Seal Mfg. Co., 2222 Diversey Pkwy., Chicago 47, Ill.

Goldak Co., Inc., 1544 W. Glenoaks Blvd., Glendale 1, Calif.
Surveying instruments; pipe locators; leak detectors

Golden-Anderson Valve Specialty Co., 1232 Ridge Ave., Pittsburgh 33, Pa.
Altitude control valves; pressure regulating valves; hydraulic operated valves
(See advertisement on page 214)

Good, Inc., James, Susquehanna Ave. & Martha St., Philadelphia 25, Pa.

Good-All Electric Mfg. Co., 112 West First St., Ogallala, Nebr.
Rectifiers; capacitors

Goodrich Co., B. F., 500 South Main St., Akron 18, Ohio
Belting; hose; packing; industrial rubber products

Goodrich Co., B. F., Sponge Products Div., Shelton, Conn.
Rubber tubing; misc. floats; curled-hair products for packaging

Goodwin, Edwin J., Box 7711-B, Houston 7, Texas
Diamond saws; boron carbide and sapphire charged saws
(See advertisement on page 79)

Goodyear Aircraft Corp., 1210 Massillon Rd., Akron 15, Ohio
Electronic computers; flight test and fire control instruments

Goodyear Tire & Rubber Co., Inc., Akron 16, Ohio
Aircraft ice-warning equipment

Gordon Co., Claud S., 3000 S. Wallace St., Chicago 16, Ill.
Pyrometers; metallurgical testing machines; thermocouples; thermocouple wire; lead wire; insulators

Gordon Enterprises, 5362 N. Cahuenga Blvd., No. Hollywood, Calif.
Aerial photographic and photogrammetric equipment, instruments and instrumentation

Gordon Machine & Tool Co., Inc., Ruan & Tackawanna St., Phila. 24, Pa.
Thermocouples; thermocouple wells

Gordos Corporation, 250 Glenwood Ave., Bloomfield, N. J.
Rectifier bulbs; charger bulbs; mercury switches; photocells

Gormac Products, Inc., 933 Twelfth St., Racine, Wis.

Gorman Manufacturing Corp., 2240 Sepulveda Blvd., Los Angeles 64, Calif.

Gorn Electric Co., Inc., 845 Main St., Stamford, Conn.
Pressure, float flow switches; miniature, and electrical

Gorton Machine Co., George, 1321 Racine St., Racine, Wis.
Pantographs; die and mold duplicators; milling machines; screw machines; cutter grinders

Gorrell & Gorrell, 336 Old Hook Rd., Westwood, N. J.
Stock timers; operation recorders; and instrument drives

Goslin Electric & Manufacturing Co., Div. of Goslin Corp., 2921 Olive St., Burbank, Calif.
Transformers; filter reactors; charging reactors; voltage regulators; electronic sub-assemblies; transmitting and receiving equipment

Gotham Audio Development Corp., 2 W. 46th St., New York 36, N. Y.
Amplifiers; audio equipment

Gotham Instruments Div., American Machine & Metals, Inc., Sellersville, Penna.
Indicating dial and recording thermometers

Gotham Scientific Co., 106 Water St., New York 5, N. Y.
Laboratory supplies

Gould Co., J. D., 4707 Massachusetts Ave., Indianapolis 18, Ind.
Electrically operated valves

Gould Laboratories, P. O. Box 216, Pitman, N. J.

Gove's Sons, Hartley, 10 Howard St., Vineland, N. J.

Gow-Mac Instrument Co., 100 Kings Road, Madison, N. J.
Gas chromatography, gas purity and gas mixing instruments, thermal conductivity type, including sensing elements for operation to 200°C
(See advertisement on page 100)

Graf-Apsco Co., 5868 Broadway, Chicago 40, Ill.
Optical instruments and components; surveying and drafting instruments

Graflex Inc., 154 Claressa St., Rochester 8, N. Y.
Scientific cameras

Graham Transmissions Inc., Menomonee Falls, Wis.
Variable speed transmissions

Grain Laboratory Equipment Inc., Long Lake, Minn.
Moisture meters; agricultural instruments; germination cabinets

Gramer-Halldorson Corp., 2734 N. Pulaski Rd., Chicago 39, Ill.
Transformers: instrument, power, adjustable, phasing, regulating

Grammes Co., L. F., 384 Union St., Allentown, Pa.

Grant Gear Works, 154 W. 2nd St., Boston, Mass.
Precision gears

Grant Pulley & Hardware Corp., High St., West Nyack, N. J.
Industrial slides; drawer slides

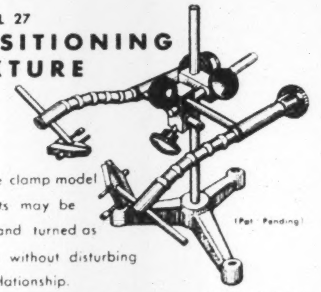
Graphik Circuits, Div. of Cinch Mfg. Co., 200 S. Turnbull Canyon Rd., La Puente, Calif.
Production; design; drafting; artwork; development; prototyping; fabricating; mechanical assembly; electrical assembly; encapsulating of printed circuits

Graphite Metallizing Corp., 1096 Nepperhan Ave., Yonkers 53, N. Y.
Oilless bearings and bushings, brushes, contacts; slip rings

Grass Instrument Co., 101 Old Colony Ave., Quincy, Mass.
Kymograph and oscilloscope cameras

Graton & Knight Company, Inc., 356 Franklin St., Worcester, Mass.
Leather cases and products for instruments, cameras, etc.

MODEL 27
POSITIONING FIXTURE
$22
Double clamp model
2 parts may be held and turned as a unit without disturbing the relationship.



R. E. GUNTHER PRINCETON JUNCTION, N. J
For more information circle 382 on inquiry card

Gray Instrument Co., 200 E. Church Lane, Philadelphia 44, Pa.
Scientific instruments; resistors; conductivity cells
(See advertisement on pages 138, 169)

Graydon Smith Products Corp., 52 Commonwealth Ave., West Concord, Mass.
Position sensitive transducers; indicating amplifiers

Grayhill, 561 Hillgrove Ave., LaGrange, Ill.
Switches; insulators; test clips

Green Instrument Co., 385 Putnam Ave., Cambridge 39, Mass.
Pantograph engraving machinery; cutter grinders, rotary tables and related equipment
(See advertisement on page 62, 134)

Green Instruments, Inc., Henry J., 1191 Bedford Ave., Brooklyn 16, N. Y.
Fortin type mercurial barometers; indicating and/or recording instruments for temperature, humidity, precipitation, wind velocity and wind direction
(See advertisement on page 106)

Green Rectifier Co., 1-10 Thirtieth St., Fairlawn, N. J.
D-c power supplies; motor speed controls; clutches; brake magnets; electro-chemical and arc power cubicles; diffusion pump fluids, instrumentation

Greenfield Tap & Die Corp., Greenfield, Mass.
Machine shop gages

Greenleaf Mfg. Div., Mandrel Industries, Inc., 7814 Maplewood Industrial Ct., St. Louis 17, Mo.
Gyroscopes; gyro servo test tables; self-balancing strain gage systems; accelerometers; servo motors; airspeed indicators

Greenlee Co., Geo. H., 1514 W. Adams St., Chicago 7, Ill.

Greibach Instruments Corp., 212 Durham Ave., Metuchen, N. J.
    Representative—Ohio, W. Va., W. Pa.
    Sid Levin & Associates
    6252 Mayfield Rd., Cleveland 24, Ohio
    HIllcrest 2-8340

Greiner Glassblowing Lab., 3604 E. Medford St., Los Angeles 63, Calif.
Manufacturers and distributors of glass aparatus and instruments for scientific research, industry and education

Greiner Co., Emil, 20-26 N. Moore St., New York 13, N. Y.
General laboratory equipment, glassware; chemicals; custom fabrication

Griebel Co., E., 8 Wayne St., Carbondale, Penna.
Thermometers; hydrometers; chemical and laboratory glassware

Gries Reproducer Corp., 1178 Beechwood Ave., New Rochelle, N. Y.
Zinc Alloy die cast parts; thermoplastic molded parts

Grieve-Hendry Co., Inc., 1401-17 W. Carroll Ave., Chicago 7, Ill.
Laboratory ovens

Grigoleit Co., 746 E. North St., Decatur, Ill.

Grinnell Co., Inc., 260 W. Exchange St., Providence 1, Rhode Island
Control valves; plastic fittings; pipe flanges

Griswold Mfg. Co., F. T., 315 W. Lancaster Ave., Wayne, Pa.
Optical Instruments

Grobet File Co. of America, Carlstadt, N. J.

Grove Valve & Regulator Co., 6529 Hollis St., Oakland 8, Calif.
Pump governors; pressure reducing and back pressure regulators for gas or liquid
(See advertisement on page 152)

Gruen Watch Co., Norwood Div., Beech & Kenilworth Sts., Cincinnati 12, Ohio

Guardian Electric Mfg. Co., 1621 W. Walnut St., Chicago 12, Ill.
Ac and dc relays; solenoids; control systems

Guardite Co., Div. of Amer. Marietta Co., 9535 South Cottage Grove., Chicago 28, Ill.

Gubelman Charts, Inc., 100 E. Kinney St., Newark 5, N. J.
Recording charts and papers
(See advertisement on page 55)

Gulton Industries Inc., Gulton Instrumentation Div., 212 Durham St., Metuchen, N. J.
Electronic; electromechanical and ultrasonic components; instruments and systems for control, processing, recording, telemetering; batteries; power supplies; medical equipment
    Representative—Ohio, W. Va., W. Pa.
    Sid Levin & Associates
    6252 Mayfield Rd., Cleveland 24, Ohio
    HIllcrest 2-8340

    Rep—W. Pa. W. Va., Ohio Border Counties
    William E. Wargo Company
    211 Yarrow Lane, Pittsburgh 36, Pa.
    TUxedo 1-5800, 1-5801

Gunther, R. E., Princeton, N. J.
Positioning fixture with flexible work-holding clamps

Gurley, W. & L. E., 514 Fulton St., Troy, N. Y.
Surveying instruments; meteorological instruments; paper testing instruments; angular measuring devices; special optical instruments, binary code discs; precision patterns on glass

Gustafson Mfg. Co., G. D., 29 E. Madison St., Chicago 2, Ill.
Instrument tools
(See advertisement on page 247)

Gustaveson, Inc., 8600 Chestnut St., Kansas City 30, Mo.
Switchboards; instrument panels; special control devices

Guthery Machine Tool Corp., 38-31 Cresecent St., Long Island City 1, N. Y.
Traub single spindle automatic screw machines
(See advertisement on page 117)

Gyromechanisms, Inc., New York Ave. at Halesight, Huntington, L. I., N. Y.
Gyros, voltage dividing resistors

Gyroscopics, Inc., 65 Rushmore St., Westbury, L. I., N. Y.
Floated gimbal single degree of freedom rate and integrating gyroscopes; accelerometers; integrators; servo amplifiers; pickoffs; torque generators; gyro motors; magnetic clutches

H

H-B Instrument Co., Inc., American & Bristol Sts., Philadelphia 40, Pa.
Thermometers; hydrometers; remote control equipment; mercury plunger relays

HD Electric Co., 760 Osterman Ave., Deerfield, Ill.
Split core ammeters; demand meters

H & H Thermostats, Inc., 682 Broadway, New York 12, N. Y.
Altimeters; recording thermometers; recorder ink for extreme temperatures

H & H Machine Co., Noble & Jackson St., Norristown, Pa.
Electronic Parts

H. J. J. Co., P. O. Box 457, Los Gatos, Calif.
Instrument tools
(See advertisement on page 174)

H. & O. Co., 648 Saylor Ave., Elmhurst, Ill.

Hauker & Co., Inc., Wm. J., 82 Beaver St., New York 5, N. Y.
Microscopes; spectroscopes; melting-point apparatus; testing machines; optical components

Hadley Assoc., Inc., H. R., 41 Barlow St., Winooski, Vt.
Weighing equipment; automatic fillers; vacuum pumps

Hagan Chemicals & Controls, Inc., P. O. Box 1346, Pittsburgh 30, Pa.
Combustion control equipment; flow meters; draft and pressure gages for low pressure gas and air measurements; recording, indicating and integrating
(See advertisement on page 64)

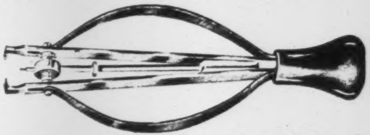
Hagen Mfg. Co., 202 20th St., Moline, Ill.
Synchronous motors; interval timers; impulse counters

Hager & Sons, E. F., 98-02 217th Lane, Queens Village 9, Long Island, N. Y.

Hain, Inc., 52 Sanford Ave., Brooklyn, N. Y.

Haines Designed Products Corp., 1840 Howell Ave., Dayton 7, Ohio
Photometers

Pull off hands and pointers more efficiently with our
PRESTO HAND and POINTER PULLER



A great time-saver for repairmen of aircraft instruments, gauges, meters, indicators, watches and clocks.
Center turret can be turned to select right size pivot to fit your job.
Simply press the side springs, and, "Presto, the Hands or pointers come off in one grip."
A precision made tool of sturdy construction and long durability which instrument repairmen should not be without. Available in two strengths. No. 4, for heavy pull—Price, $6.25. No. 7, for light pull—Price, $6.75.
At Jewelers' Tool & Supply Houses, or write us
G. D. GUSTAFSON MFG. CO.,
29 E. Madison St., Chicago 2, Ill.
For more information circle 383 on inquiry card

Hairspring Vibrating Co., 406 32nd St., Union City, N. J.

Halax Corp., 17470 Shelbourne Way, Los Gatos, Calif.
Special bearings; aluminum components; component assemblies for aircraft electronics and avionics

Haledy Electronics Co., 57 William St., New York 5, N. Y.
Automatic timers; photoelectric control systems; synchroscopes; relays and switches

Hall Co., Gordon L., Old Lyme, Conn.
Assembly bins and racks

Hall-Barkan Instruments, Inc., 181 Marbledale Road, Tuckahoe 7, N. Y.
Instrument components

Hall-Scott, Inc., 2950 N. Ontario St., Burbank, Calif.
Amplifiers; converters; telemetering systems; power supplies

Hall Sonic Engineering Co., Inc., 2402 2nd St., Peru, Ill.

Hallamore Electronics Co., 8352 Brookhurst St., Anaheim, Calif.

Halliburton Oil Well Cement Co., Duncan, Okla.
Oil well surveying instruments

Hallicrafters Co., 4401 W. 5th Ave., Chicago 24, Ill.
Telemetering systems; crystal filters; coils

Hallikainen Instruments, 1341 Seventh St., Berkeley 10, Calif.
Analytical instruments for laboratory and continuous processes
    New York State Representative (excl. NYC)
    Nickles Engineering Company
    830 Linden Ave., Rochester 10, N. Y.
    LUdlow 6-4988

    Midwestern Representative
    Sherertz-Henderson Co.
    5707 W. Lake St., Chicago 44, Ill.
    COlumbus 1-1032

Haloid XeroX, Inc., 6 Haloid St., Rochester 3, N. Y.
Photocopy equipment

Hamilton Mfg. Co., Two River, Wis.
Laboratory furniture

Hamilton Rubber Mfg. Corp., P. O. Box 361 Trenton 3, N. J.

Hamilton Tool Co., 9th & Hanover, Hamilton, Ohio
Precision drilling, tapping, gear hobbing machines

Hamilton Watch Co., Lancaster, Penna.
Fire control instruments; hole gages; clockworks; hairsprings; metal strip and foil

Hamlin, Inc., 1316 Sherman Ave., Evanston, Ill.
Mercury switches, electrolytic potentiometers, thermal relays

Hammarlund Mfg. Co., Inc., 460 W. 34th St., New York 1, N. Y.
Electrical and electronic remote-metering and remote-control systems; components

Hammel-Dahl Div. of General Controls Co., Warwick Industrial Park, Warwick, R. I.
Diaphragm control valves of all types for standard or special applications; positioners; pressure pilots; temperature pilots; other allied control equipment

Hanner Electronics Co., Inc., P. O. Box 531, Princeton, N. J.
Nuclear spectrometers; dynamic voltage tracer; power supplies

Hand & Sons Co., John E., Atlantic & Washington Aves., Haddonfield, N. J.
Navigational instruments

Handley Electronics, Inc., 14758 Keswick St., Van Nuys, Calif.
Absolute or differential pressure transducers with potentiometer or electro-magnetic output; visual temperature indicating instruments

Handy & Harman 82 Fulton St., New York 38, N. Y.
Silver, gold and platinum in mill forms; silver and gold brazing alloys

Hankison Corporation, College & Pike, Canonsburg, Penna.
Condensing type compressed air filters; small-volume desiccant dehydrators for low flow or dead end air service to 6000 psig
(See advertisement on page 36)

New York Metropolitan Representative
Strachan-Mackoe Corp.
90 West St., New York 6, N. Y.
REctor 2-0305 or 2-0586

Hanna Engineering Works, 1765 No. Elston Ave., Chicago 22, Ill.
Air hydraulic cylinders; control valves

Hannifin Corp., 541 S. Wolf Rd., Des Plaines, Ill.

Hanovia Lamp Co., Spec. Prods. Div., 100 Chestnut St., Newark 5, N. J.
Quartz mercury arc lamps

Hansen Electronics Co., 7117 Santa Monica Blvd., Los Angeles 46, Calif.
Graphic circuits; tape resistors; components

Hansen Manufacturing Co., 4031 W. 150th St., Cleveland 35, Ohio
Quick disconnect couplings

Hansen Mfg. Co., Inc., Princeton, Ind.
Synchronous a-c timing motors; clock movements

Hansen Co., Wm., 165 Silverbrook Ave., Niles, Mich.
Timers and clocks

Hanson-Gorrill-Brian, Inc., 85 Hazel St., Glen Cove, N. Y.
Aircraft and aviation instruments; automatic digital data loggers; thyratron packaged grid circuits and amplifiers

Harco Laboratories, Inc., 77 Olive St., New Haven, Conn.
Pressure and temperature primary sensing elements

Harder Co., Donald C., 3710 Midway Drive, San Diego 10, Calif.

Hardwick, Hindle, Inc., 40 Hermon St., Newark 5, N. J.
Resistors

Pittsburgh Representative
Edgar M. Moore & Co.
6964 Thomas Blvd., Pittsburgh 8, Pa.
EMerson 1-8780

Hare Co., D. G. C., 30 Burtis Ave., New Canaan, Conn.
Control systems; data-processing systems; tape recorders

Harowe Precision Inc., Mount Rd., Lenni Mills, Penna.
Servo & gyro motors; synchros

Harris & Co., Arthur, 212 N. Aberdeen St., Chicago 7, Ill.

Harris Manufacturing Co., 134 West 26th St., New York 1, N. Y.

Harrison Labs., Inc., 45 Industrial Rd., Berkeley Heights, N. J.
Regulated power supplies; television equipment

Harrison Radio Corp., 225 Greenwich St., New York 7, N. Y.
Electrical and electronic instruments distributors

Harshaw Scientific Div., Harshaw Chemical Co., 1945 E. 97 St., Cleveland 6, Ohio
Laboratory supply house

Hart Mfg. Co., 220 Bartholomew Ave., Hartford, Conn.
Switches; relays; thermostates; electrical and electromechanical devices

Hart Mfg. Co., R. E., 5115 Carpenter Rd., Box 72, Ann Arbor, Mich.
Production counters

Hart Moisture Gauges, see Kaydel Moisture Gauges

Hart Moisture Meters, Raymond S. Hart, Inc., 836 W. Islip Blvd., Babylon, L. I., N. Y.
Moisture testers

Hartford Machine Screw Co., Windsor, Conn.
Screw machine products; precision components and assemblies; stock commercial fastners

Hartford Steel Ball Co., Inc., Hartford 6, Conn.

Harvey-Wells Electronics, Southbridge, Mass.
Aircraft navigational instruments

Harwood Co., Div., Aviation Products Co., 7266 Beverly Blvd., Los Angeles, Calif.

Hasco Valve & Machine Co., 1263 N. 70th St., Milwaukee 13, Wis.
Automatic and manual control valves

Hasler-Tel Co., 30 Vesey St., New York 7, N. Y.
Chronometric portable tachometers; portable speed indicators
(See advertisement on page 186)

Hass Instrument Corp., The (formerly Hass Bros. Inst. Co.) 5476 Forestville Road, Washington 28, D. C.
Barometers; altimeters; manometers
(See advertisement on pages 43, 120)

Hassall, Inc., John, P. O. Box 2201, Westbury, L. I., N. Y.
Special nails, rivets, screws; job-designed small parts

Hastings-Raydist, Inc., P. O. Box 1275, Wythe Branch, Hampton, Va.
Vacuum, pressure, velocity, flow-measuring instruments; electronic surveying, tracking, positioning navigation systems

Midwestern Representative
Sherertz-Henderson Co.
5707 W. Lake St., Chicago 44, Ill.
COlumbus 1-1032

Hathaway Instrument Div., Hamilton Watch Co., 5800 E. Jewell St., Denver 22, Colo.
Instruments and apparatus for electrical and mechanical measurements and control

Hausser & Son, C. A., 6040 Belfield Ave., Philadelphia 44, Pa.
Laboratory apparatus; biological instrumentation

Haveg Industries, Inc., 900 Greenbank Rd., Wilmington 8, Del.
Ceramic valves, tubing, fittings

Hawk Tool & Engineering Co., Inc., Clarkston, Mich.
Controllers and testing devices

Haydon Co., A. W., 232 N. Elm St., Waterbury 20 Conn.
Relays and timers
(See advertisement on page 29)

Haydon Manufacturing Co., 245 E. Elm St., Torrington, Conn.
A-c, d-c motors; timing devices; clock movements

Haydon Switch Co., 536 So. Leonard St., Waterbury 20, Conn.
Switches

Haydu Electronic Products Inc., 1426 W. Front St., Plainfield, N. J.

Haynes Stellite Div., Union Carbide Corp., 30 E. 42nd St., New York 17, N. Y.
Special metal alloys, bushings, castings, tubing, wire

Hays Corp., Michigan City 39, Ind.
Instrument and control systems for combustion, temperature, pressure, level, flow and gas analysis; data reduction systems

Hays Mfg. Co., Indus. Sales Div., 12th & Liberty Sts., Erie 6, Pa.
Flow Controls

Hayward Scientific Glass Corp., 217 Magnolia St., Whittier, Calif.
Optical glass manufacturing; special heat-treatment; blanks for small and massive optics; leadshielding types; prototype and pyrex glass; index measurement; research
(See advertisement on page 103)

Heat Timer Corp., 657 Broadway, New York 12, N. Y.
Running time recorders

Heil Scientific, Inc., 214 S. 4 St., St. Louis 2, Mo.
Laboratory supplies

Heiland Div., Minneapolis-Honeywell, 5200 E. Evans Ave., Denver 22, Colo.
Direct recording oscillographs, standard photographic oscillographs, amplifiers, bridge balance units; photoflash and other photographic products

Heinemann Electric Co., P. O. Box 299, Trenton 2, N. J.

Heinze Electric Co., 685 Lawrence St., Lowell, Mass.
Sub-fractional-hp motors and blowers

Heise Bourdon Tube Co., Brook Rd., Newton, Conn.
Bourdon tube gauges (high precision) for fluid pressures
(See advertisement on page 208)

Heitz, Inc., Karl, 150 W. 54th St., New York 19, N. Y.
Precision photo equipment; binoculars; microscopes

Heli-Coil Corp., Shelter Rock Lane, Danbury, Conn.
Screw-lock

Helicoid Gage Div., American Chain & Cable Co., 929 Connecticut Ave., Bridgeport, Conn.
Gages for pressure, vacuum or compound service
(See advertisement on page 145)

Helio Instrument Co., Inc., 1 S. Reed St., E. Riverton, N. J.
Laboratory and industrial optical instrumentation

Helipot Corporation, 2500 Fullerton Rd., Fullerton, Calif.
Precision potentiometers; turns-counting dials; breadboard parts; servomotors; resolvers; synchros; delay lines; expanded scale voltmeters; linear scale ammeters; voltage regulators

Heller Co., Gerald K., 1819 Industrial Rd., Las Vegas, Nev.
Electronic motor controllers

Hellige, Inc., 877 Stewart Ave., Garden City, N. Y.
Scientific instruments; laboratory bacteriological supplies

Henderson & Co., H. B., P. O. Box 757, East Liverpool, Ohio
Pyrometric cones

Henry Valve Co., Inc., 3215 North Ave., Melrose Park, Ill.
Valves; driers; strainers; steel fittings; accessories for refrigeration, air conditioning, industrial

Henschel Corp., 14 Cedar St., Amesbury, Mass.
Marine and industrial interior communication equipment; monitors; temperature alarms

Henson Co., Fred C., Box 5265, Pasadena, Calif.
Electroscopes; optical instruments and components; designers and builders of custom instruments

Henszey Co., Watertown, Wis.
Feed water meters; flow indicators; heat exchangers; boiler feed regulators; meters and flow indicators for corrosive chemicals

Herbach & Rademan, Inc., 1204 Arch St., Philadelphia 7, Pa.
Electronic equipment distributors

Hercules Fastner Corp., 2720 Clybourn Ave., Chicago 14, Ill.

Herd, Harold H., 1830 Fletcher St., Pasadena, Calif.
Instrument scales and dials; photo-etched reticles

Hermaseal Co., Inc., 1101 Lafayette St., Elkhart, Ind.
Glass-to-metal seals

Hermetic Seal Corp., 33 S. Sixth St., Newark 7, N. J.

Hermetic Sealing Corp. See General Hermetic

Herron Optical Co., 9117 S. Main St., Los Angeles 61, Calif.
Precision lenses, prisms and mirrors
(See advertisement on page 130)

Herzog Miniature Lamp Wks., Inc., 50-17 5th St., Long Island City 1, N. Y.

Hesse-Eastern Div., Flight Fabrics, Inc., 210 Broadway, Everett 49, Mass.
Control systems; testing machines

Hetherington & Berner, 701 Kentucky Ave., Indianapolis 7, Ind.
Fluidometers

Hetherington Inc., Delmar Dr., Folcroft, Penna.
Snap-action switches, push-button, toggle and rotary; indicator lights; relays

Heusser Instrument Mfg. Co., 121 W. Malvern Ave., Salt Lake City 15, Utah
Analytical balances

Hevi-Duty Electric Co., 2040 W. Wisconsin Ave., Milwaukee 1, Wis.
Dry type transformers; saturable reactors; constant-current regulators; laboratory, industrial-heat-treating furnaces; ceramic kilns, gas preparation units.

Hewlett-Packard Co., 275 Page Mill Road, Palo Alto, California
Test and measuring instruments; audio oscillators; voltmeters; signal generators; electronic counters, etc.

New York Metropolitan Area Rep.
RMC Associates
236 E. 75th St., New York 21, TRafalgar 9-2023
391 Grand Ave., Englewood N. J., LOwell 7-3933

Philadelphia Area Representative
The I. E. Robinson Company
7404 West Chester Pike, Upper Darby, Pa.
SHerwood 8-1294, FLanders 2-7017

Hewson Co., Inc., 443 Broad St., Newark 2, N. J.
High-voltage test instruments; power supplies; automatic processing control systems; automatic alarm systems

Hexacon Electric Co., 161 W. Clay Ave., Roselle Park, N. J.
Electric soldering irons

Heyman Mfg. Co., 530 Michigan Ave., Kenilworth, N. J.
Inspection instruments

Hi-G, Inc., Bradley Field, Windsor Locks, Conn.
Sub-miniature, hermetically sealed, a-c & d-c relays

Hi-Grade Alloy Corp., 1236 S. Talman, Chicago 8, Ill.
Printed circuit solders and fluxes; flux-residue remover, anodes, preforms; fusible alloys

Hi-Q Div., Aerovox Corp., Seneca St., Olean, N. Y.
Capacitors and resistors

Hickok Electrical Instrument Co., 10519 Dupont Ave., Cleveland 8, Ohio
Electric indicating instruments; electronic test equipment
(See advertisement on page 2)

Sales Representatives

New England
Coakley Sales Office—DEcatur 2-4800
148 Needham St., Boston 61, Mass.

D. C., Virginia, Maryland
J. L. Walls—EXecutive 3-2692
Rosslyn Sta., Arlington 9, Va.

N. & S. Car., Tenn., Ga., Ala., Fla.
Hollingsworth & Still—MUrray 8-5878
508 Whitehead Bldg., Atlanta, Ga.

N. Y. City, N. J., Eastern Penna.
K. E. Hughes Co.—UNion 7-3204
4808 Bergenline Ave., Union City, N. J.

Upper N. Y. State, Erie, Penna.
R. W. Mitscher Co.—WAshington 2517
487 Ellicott Sq. Bldg., Buffalo 3, N. Y.

Ohio, Ky., W. Va., W. Pa., S. Ind.
James M. Landfear & Co.—FAirmont 1-4533
12429 Cedar Rd., Cleveland 6, Ohio

Michigan, Northern Indiana
George Harbaugh—LIncoln 5-3409
117 W. 12 Mile Rd., Royal Oak, Mich.

Mississippi, S. Louisiana
Earl K. Moore Co.—AUdubon 2407
5864 Louisville, New Orleans 24, La.

N. Dak., S. Dak., Wis., Minn., N. Ia.
Nick J. Laub Co.—JUniper 8-4663
3749W. Broadway, Minneapolis 22, Minn.

Northern Illinois, S. Wisconsin
L. C. McCarthy—KIldare 5-7976
7117 W. Addison St., Chicago 34, Ill.

Nebr., Kan., Mo., S. Iowa, S. Ill.
Terwilliger Sales Co.—NIagra 2-2421
7113 W. 80th St., Overland Park, Kan.

Texas, Okla., Ark., N. La.
J. Earl Smith—FLeetwood 7-1727
Box 35331, Airlawn Sta., Dallas 35, Tex.

Wyo., Colo., Utah, New Mexico
Gordon G. Mass—ELgin 3-1452
P. O. Box 428, Greeley, Colo.

West Coast, Pacific Northwest
George Ksander—THornwall 5-1771
2585 Shattuck Ave., Berkeley 4, Calif.

Hieatt Engineering Co., P. O. Box 349, Burbank, Calif.
Environmental test chambers

Hiergesell & Sons, Wm., 295 Pearl St., New York 7, N. Y.
Thermometers and hydrometers

High Pressure Equipment Co., 1222 Linden Ave., Erie, Pa.
High-pressure equipment for pressure or temperature applications

High Vacuum Equipment Corp., 2 Churchill Rd., Hingham, Mass.
Vacuum pumps and gates; electrical feed-throughs; vacuum metallizing; impregnating and furnace units

High Voltage Engineering Corp., Burlington, Mass.
Van de Graaff particle and microwave linear accelerators

Hill & Co., E. Vernon, P. O. Box 189, Lake Geneva, Wisc.
Air testing instruments, accessories

Hillburn Electronic Products Co., 55 Nassau Ave., Brooklyn 22, N. Y.
Relays, solenoids, counters

Hills-McCanna Co., 3025 N. Western Ave., Chicago 18, Ill.
Diaphragm valves; metering and proportioning pumps

Hillyer Instrument Co., Inc., 381 Centennial Ave., Cranford, N. J.
Computers; automatic machine tool control systems

Hindley Mfg. Co., 51 Charles St., Valley Falls, R. I.

Hirschmann Co., Inc., Carl, 30 Park Ave., Manhasset, N. Y.
High precision machine tools

Hitemp Wires, Inc., 1200 Shames Dr., Westbury, L. I., N. Y.

Hobbs Corp., J. W., 2048 Yale Blvd., Springfield, Ill.
Running time meters; pressure switches

Hoffman Engrg. Corp., 183 R Sound Beach Ave., Old Greenwich, Conn.
Crush preventing grommets; light filters, standards; light testing laboratory

Hoffman Specialty Mfg. Corp., 1700 W. 10th St., Indianapolis 7, Ind.
Vacuum breakers; packless valves

Hogan Laboratories, Inc., 155 Perry St., New York 14, N. Y.
Computers; wave filters; chemical analyzers; densitometers; concentration recorders

Hoke, Inc., 33 Piermont Rd., Cresskill, N. J.
Valves: needle, toggle, packless, bar stock, metering, panel-mounting, check, reducing; flow gages; filters

Distributor—Metropolitan N. Y.—N. J.
R. S. Crum & Co.
860 Mountain Ave., Mountainside, N. J.
Adams 2-4444

Representative—Pittsburgh, Charleston, W. Va.
Fogleman Co., Inc.
3849 Willow Ave., Pittsburgh 34, Pa. LE-1-4005-6
406 C St., S. Charleston, W. Va. RI-4-8401

Holex Inc., 2751 San Juan Rd., Hollister, Calif.
Hermetic seals

Holtzer-Cabot Electric Div., National Pneumatic Co. Inc. 420 Lexington Ave., New York 17, N. Y.
Fractional hp motors

Hoover Electronics Co., 7517 Marston St., Baltimore 7, Md.
Specialized instrumentation systems including telemetering, analog to digital converters, wind tunnel instrumentation, and specialized test equipment

Hopkins Engineering Co., 12900 Foothill Blvd., San Fernando, Calif.
Miniature, high temperature capacitors of paper, plastic film, metallized plastic films; custom radio interference filters and supression devices

Houlihan Co., T. J., 2508-18 W. Lawrence Ave., Chicago 25, Ill.

Houston-Fearless Corp., 11801 Olympic Blvd., Los Angeles 64, Calif.
Motion-picture processing equipment

Howard Clock Products, Inc., 256 Charles St., Waltham, Mass.
Electric and mechanical clockwork; precision gears; high precision contract machining

Howard Industries, Inc., 1760 State St., Racine, Wisc.
Fractional-hp electric motors; generators; fountain mixers

Howe & French Inc., 99 Broad St., Boston 10, Mass.
Laboratory supplies

Howe Scale Co., Inc., Rutland, Vt.
Weighing scales

Howell Automatic Mach. Co., 12900 Berea Rd., Cleveland 11, Ohio
Precision screw machine products

Howell Elect. Motors Co., 408 N. Rosevelt Ave., Howell, Mich.

Howell Instrument Co., 3101 Trinity St., Fort Worth, Texas
Slide-wire potentiometers, pyrometer potentiometers, light-beam galvanometers

Hoyt Electrical Instrument Works. See Burton Rogers Sales Div.

Hubbell, Inc., Harvey, State St. at Bostwick Ave., Bridgeport, Conn.
Wiring devices and electronic connectors

Hubbell Metals, Inc., 2817 Laclede Ave., St. Louis 3, Mo.

Hudson Radio & Television Corp., 37 65th St., New York 23, N. Y.
Electrical and electronic instruments and supplies

Hufco Industries, 2815 W. Olive St., Burbank, Calif.
Relays

Huggins Laboratories, 711 Hamilton Ave., Menlo Park, Calif.
Traveling wave tubes; backward wave oscillators and amplifiers

Hughes Aircraft Co., Electron Tube Div., 5261 W. Imperial Blvd., Los Angeles 45, Calif.

Hughes Aircraft Co., Semi-Conductor Div., International Airport Station, Los Angeles 45, Calif.
Silicon, germanium diodes, transistors; silicon rectifiers, and capacitors

Hughes Co., Kenneth E., 4808 Bergenline Avenue, Union City, N. J.
(See advertisement on page 85)

Hugo Bosca Co., 106 E. Main St., Springfield, Ohio

Hulcher Co., Inc., Charles A., 40 Manteo Ave., Hampton, Va.
High-speed cameras; stroboscopic light sources

Hull Mfg. Co., P. O. Box 246, Warren, Ohio
Compasses

Humboldt Mfg. Co., 4466 N. Harlem Ave., Chicago 31, Ill.
Laboratory apparatus; testing equipment for asphalt, cement, concrete, petroleum products, soils

Humphrey, Inc., 3794 Rosecrans, San Diego, Calif.
Gyroscopes; potentiometers; accelerometers

Humphrey Products Div. of General Gas Light Co., 202 N. Park St., Kalamazoo, Mich.
High sensitivity valves

Hunt Valve Co., P. O. Box 337, Salem, Ohio
Air and hydraulic control valves; couplings; valve type couplings

Hunter Manufacturing Co., 108 North Linn St., Iowa City, Iowa
Electronic, electromechanical instruments, and controls

Hunter Spring Co., Lansdale, Pa.
Precision springs, wire products, mechanical force gages, constant-force springs and motors

Hupp Electronics Co., Div. of Hupp Corp., 743 Circle Ave., Forest Park, Ill.
Photocells; remote control and telemetering equipment; quartz crystals

Huppert Co., K. H., 6830-32 S. Cottage Grove Ave., Chicago 37, Ill.
Laboratory furnaces, heating elements; ovens

Hurst Tool & Mfg. Co., Princeton, Ind.
Subfractional horsepower motors

Hy-Pro Tool Co., P. O. Box 945, New Bedford, Mass. Metal cutting tools

Hycon Eastern, Inc., 75 Cambridge Parkway, Dept. DA6, Cambridge 42, Mass.

Representative—Wash., Ore., Idaho, Mont.
Burt C. Porter Company
1209 Poplar Place, Seattle, Wash.
EAst 3-8330

Hycon Electronics, Inc., 370 So. Fair Oaks Ave., Pasadena, Calif.
Rack-mounted oscilloscopes, digital voltmeters, color bar dot generator, and color scope.

Hycor Division of International Resistance Co., 12970 Bradley Ave., Sylmar 6, Calif.

Hyde Instrument Corp., 2377 E. Washington St., Pasadena 7, Calif.
Optical gages; surveying instruments

Hydraulic Controls Co., Inc., 217 California St., Newton 58, Mass.
Hydraulic and mechanical servomechanisms; components; solenoid valves

Hydraulic Research & Mfg. Co., 2835 N. Naomi St., Burbank, Calif.
Hydraulic and pneumatic valves; pressure switches; hydraulic servo valves

Hydromatics, Inc., 70 Okner Pkwy., Livingston, N. J.
Valves and valve operating devices

Hydroway Scales, Box 531, Oak Ridge Sta., Royal Oak, Mich.
Indicating scales

Hygrotester Inc., P. O. Box 923, Brooklyn 1, N. Y.
Moisture measuring, recording, controlling instruments

Midwestern Representative
Sherertz-Henderson Co.
5707 W. Lake St., Chicago 44, Ill.
COlumbus 1-1032

I

I-L-S Instrument Corp., 4525 W. 160 St. Cleveland 35, Ohio
Electrical and electronic instruments; power supplies; counters; speed indicators

I.T.E. Circuit Breaker Co., 19th & Hamilton Sts. Philadelphia 30, Pa.
Fixed and variable resistors; manganin resistors switchgear

Ideal-Aerosmith, Inc., 12909 Cerise Ave., Hawthorne, Calif.
Aircraft instrument test apparatus; sensitive needle valves; Electromechanical and electronic components

Ideal Industries, Inc., 1420 Park Ave., Sycamore, Ill.
Commutator maintenance equipment; electricians tools wire connectors; machinery products

Ideal Precision Meter Co., Inc., 126 Greenpoint Ave. Brooklyn 22, N. Y.
D'Arsonval movements

Illinois Coil Spring Co., 2100 N. Major Ave., Chicago 39, Ill.

Illinois Testing Laboratories, Inc., 420 N. LaSalle St., Chicago 10, Ill.
Temperature, air and dewpoint measuring and controlling instruments
(See advertisement on page 26)

Illinois Tool Works, Licon Div., 2501 N. Keeler Ave., Chicago 39, Ill.
Precision electrical switches and controls

Imetra Co., Ltd., 136 Liberty St., New York 6, N. Y.
Instrument pivots and bearings

Impact Register Co., P. O. Box 445, Champaign, Ill.
Instruments for determining and recording impacts received by railroad cars and riding qualities of railroad cars, automobiles

Impact-O-Graph Corp., 1900 Euclid Ave., Cleveland 15, Ohio
Impact recorders

Imperial Brass Mfg. Co., 6300 W. Howard St., Chicago 48, Ill.
Fittings, tubing, cutters and benders; valves

Distributor
Williams and Co., Inc., The House of Metals
Cleveland, Cincinnati, Columbus, Toledo, Ohio; Louisville, Ky.; Pittsburgh, Pa

Imperial Molded Products Corp., 2927 W. Harrison St., Chicago 12, Ill.

Imtra Corp., 11 University Rd., Cambridge 38, Mass.
Stepping and telephone relays; Tension gages

Indiana Gear Works, Inc., 1458 E. 19th St., Indianapolis 7, Ind.
Helicopter transmissions; aircraft actuators; ultra precise gearing

Indiana Steel Products Co., Valparaiso, Ind.
Alnico permanent magnets; cunife, indox ceramic magnets, and miscellaneous

Indicating Calipers Corp., 1359 York Ave., New York 21, N. Y.
Indicating calipers

Indikon Co., 76 Coolidge Hill Rd., Watertown 72, Mass.
Electronic pressure, temperature and vibration monitors; instrument servos; automatic capacitance, resistance limit bridges

Induction Motors Corp., 570 Main St., Westbury, L. I., N. Y.
Dynamotors; synchros; resolvers; solenoids; servo-, gear-, blower-, actuator-motors; synchronous, nonsynchronous

Induction Motors of Calif., 6058 Walker Ave., Maywood, Calif.
DC solenoids for computers, gyros, other avionic equipment
(See advertisement on page 186)

Industrial Cold Co., 1000 E. McNichols Rd., Detroit 3, Mich.
Low-temperature and altitude test chambers

Industrial Condenser Corp., 3243-65 N. California Ave., Chicago 13, Ill.
Oil paper and electrolytic capacitors

Industrial Control Co., 805 Albin Ave., Lindenhurst L. I., N. Y.
Servo amplifiers; magnetic amplifiers; electronic test equipment

Industrial Control Panel Co., 517 W. Monroe St., Chicago 6, Illinois
Automatic control systems and components

Industrial Development Labs., Inc., 17 Pollock Ave., Jersey City 5, N. J.
Mass flowmeters, dual null bridges

Industrial Devices, Inc., 22 State Rd., Edgewater N. J.
Electrical measuring instruments; neon indicating signals

Industrial Electronic Controls Co., P. O. Box 16, Brooklyn 35, N. Y.
Electronic counters, photo-electric controls

Industrial Electronic Engineers 3973 Lankershim Boulevard, North Hollywood, Calif.
Electronic and digital computers; remote control weighing systems; relay switching systems

Industrial Electronics Co., Inc., Hanover, Mass.
Dimensional, smoke density and liquid-level instruments

Industrial Electronics, Inc., 8060 Wheeler St., Detroit 10, Mich.
Electronic assemblies; automatic electronic gaging machines

Industrial Engineering Corp., 525 E. Woodbine, Louisville 8, Ky.
Designers, engineers, and builders of electronic and electrical functional test equipment; hydraulic component parts
(See advertisement on page 153)

Industrial Engineering Corp., Rea Bldg., Terre Haute, Ind.
Relays

Industrial Gauges Corp., 1500 The Plaza, West Englewood, N. J.
Gaging and inspection devices; remote control equipment

Industrial Hardware Manufacturing Co., Inc., 109 Prince St., New York 12, N. Y.
Printed circuit, laminated, transistor and subminiature sockets; wired assemblies; metal and bakelite stampings

Industrial Instrument Corp., P. O. Box 777, Austin, Texas
Flow meters; orifice plates and unions; thermowells, allied products

Industrial Instruments Inc., 89 Commerce Rd., Cedar Grove, N. J.
Electrolytic conductivity apparatus, dielectric strength and insulation testers, wheatstone bridges, decade boxes, tank level indicators, and motor feed controllers.
(See advertisements on pages 41, 47, 48, 62, 79, 109, 112, 169, 173)

Industrial Instruments Automation Corp., 93 Commerce Rd., Cedar Grove, New Jersey
Automatic component production and test equipment

Industrial Instrument Components Corp., 95 Commerce Rd., Cedar Grove, New Jersey
Precision resistors and capacitors

Industrial Instruments Engineering Corp., 91 Commerce Rd., Cedar Grove, New Jersey
Thermal conductivity and catalytic combustion equipment for gas analysis
(See advertisements on pages 99, 101)

Industrial Jewel Bearing Co., Stockham Bldg., Morrisville, Pa.

Industrial Nucleonics Corp., 1205 Chesapeake Ave., Columbus 12, Ohio
Process control systems for the rubber, plastics, paper, metals, tobacco and other process industries
Industrial Pyrometer & Supply Co., Alton, Ill.
Thermocouples

Industrial Products Div., General Tire & Rubber Co., Wabash, Indiana

Industrial Rectifier Devices, Inc., 324 Lafayette St., New York 12, N. Y.
Rectifier-type power supplies

Industrial Scientific, Inc., 2920 Shotts St., Box 509, Fort Worth 1, Texas
Laboratory supplies

Industrial Tectonics, Inc., P.O. Box 606, 3684 Jackson Rd., Ann Arbor, Mich.
Special ball and roller bearings—non-magnetic, corrosion-resistant, heat-resistant, special designs; special material balls; master ball sets

Industrial Test Equipment Co., 55 E. 11th St., New York 3, N. Y.
Phase meters; null detectors; impedance comparators; power oscillators; frequency standards; automatic hipot testers
(See advertisement on page 135)

Industrial Timer Corp., 1407 McCarter Highway, Newark 4, N. J.
Synchronous-motor-driven electrical timing devices; punched-card programming equipment

Industro Transistor Corp., 35-10—36th Ave., Long Island City 6, N. Y.

Industronics, Box 424, Arlington Heights, Ill.
Power supplies; generators; audio oscillators

Inertial Instruments, Inc., 1738 Colorado, Santa Monica, Calif.
Mass flowmeters

Inet-Palmer Div., Leach Corp., 4441 S. Santa Fe Ave., Los Angeles 58, Calif.
Automatic regulators; power supplies; generators; rectifiers

Inferno Mfg. Corp., Box 7067, Shreveport, La.
Combustion instruments

Infilco Inc., P. O. Box 5033, Tucson, Arizona

Infrared Industries, Inc., 163 Highland Ave., Needham Heights 94, Mass.
Infrared photoconductors; interference filters; test instrumentation

Ingersoll-Rand Company, Phillipsburg, N. J.
Instrument air compressors

Inlaid Optical Corp., 1058 Broad St., Providence 5, R. I.

Insco Co., Div. of Barry Controls, Inc., Hollis St., Groton, Mass.
Recorder accessories and systems; multiple-step speed reducers; vibration test instrumentation

Instant Circuit Div., 32-44 Francis Lewis Blvd., Flushing 58, N. Y.

Instrol Corp., See Cope, T. J.

Instron Engineering Corp., 2500 Washington St., Canton, Mass.
Testing machines

Instru-Lec Corp., 520 Homestead Ave., Mt. Vernon, N. Y.
Precision, fine-pitch gears, gear boxes and trains

Instrument Associates, Great Neck Road, Great Neck, N. Y.
Aviation and ground instrumentation

Instrument Cases, Inc., 510 W. Garfield Ave., Glendale 4, Calif.
Standard instrumentation transit cases and combination cases

Instrument Components, Inc., Div. of Belock Inst. Corp., 111th St. & 14th Ave., College Point, N. Y.
Electromechanical components

Instrument Corp. of America, P. O. Box 37, Blacksburg, Va.

Instrument Corp. of Florida, P. O. Box 1226, Melbourne, Fla.
Military electronics equipment

Instrument Development Labs., Inc., 67 Mechanic St., Attleboro, Mass.
High-speed rotary and telemetering switches; analog to digital converters; optical color matchers; scanners; stepping switches

Instrument Development & Mfg. Co., 3018 East Foothill Blvd., Pasadena 8, Calif.
Electronic engineering, development and manufacturing; electro-mechanical, mechanical engineering and manufacturing; bearings: precision, high temperature; of special design

Instrument Electronic Corp., P. O. Box 830, Port Washington, N. Y.
Electronic voltmeters

Instrument Electronics Corp., 104 W. Jefferson St., Falls Church, Va.
Electronic instruments

Instrument Engineering Service, R. 3, Box 345, Michigan City, Ind.
Gas analysis and combustion instrumentation

Instrument Gear Works, 4624 N. Oketo, Chicago 31, Ill.
Standard and special small gears

Instrument Laboratories, 315 W. Walton Place, Chicago 10, Ill.
Electrical testing sets

Instrument Laboratory, Inc., P. O. Box 4008, Seattle 99, Washington
Millivolt-type indicating pyrometers; salinity equipment for marine application; electromagnet balances for wind tunnel use; panels; graphic and non-graphic

Instrument Motors, Div. of PM Industries, Inc., 375 Coit St., Irvington, N. J.
Motors, transformers

Instrument Products, 2927 W. Harrison St., Chicago 12, Ill.

Instrument Resistors, Inc., 1036 Commerce Ave., Union, N. J.
Resistors, fixed, wire wound, precision type

Instrument Specialties Co., Inc., 231 Bergen Blvd., Little Falls, N. J.
Beryllium-copper coil and flat springs, beryllium-copper screw machine products

Instrument Tool & Engrg. Corp., 2507 W. Harrison St., Chicago 12, Ill.

Instrumentation Associates, 17 W. 60th St., New York 23, N. Y.

Instruments Corp., 4 N. Central Ave., Baltimore 2, Md.
Meteorological, hydrological and photogrammetric instruments

Instruments for Industry, Inc. 150 Glen Cove Rd Mineola, L. I., N. Y.
IF broad band amplifiers

Instruments Inc., 122 N. Madison, P. O. Box 556, Tulsa, Okla.
Level indicators and controllers—gamma ray, capacitance and pneumatically actuated
Pittsburgh & Buffalo Representative
M. S. Jacobs & Associates, Inc.
810 Noblestown Rd., Pittsburgh 5, Pa. WA-1-6140
1807 Elmwood Ave., Buffalo 7, N. Y. DE-3229

Insulated Circuits Inc., P. O. Box 717, Passaic, N. J.

Insulation Manufacturers Corp., 565 W. Washington Blvd., Chicago 6, Ill.
Manufactures and distributors of electrical insulation materials

Intelex Systems, Inc. 22 Thames St., New York 6, N. Y.
Electronics, telecommunications components equipments, and systems

Intercontinental Dynamics® Corp., 170 Coolidge Ave. Englewood, N. J.
Photoelectronic control systems statistical electronic generators; test equipment

Interelectronics Corp., 2432 Grand Concourse, New York 58, N. Y.
High fidelity audio equipment; power supplies
(See advertisement on page 144)

International Business Machines Corp., 590 Madison Ave., New York 22, N. Y.
Control systems; program controllers; time recorders; data-processing systems

International Decalcomania Co., 32 Union Square, New York 3, N. Y.
Nameplates; direction labels; quick application water slide materials

International Electronic Research Corp., 145 W. Magnolia Blvd., Box 271, Burbank, Calif.
Heat-dissipating tube shields; power oscillators

International Instrument Co., Canyon, Calif.
Liquid measuring apparatus; automatic titration equipment; (digital) precision recording titration; pH control instruments

International Instruments Inc., P. O. Box 1954, New Haven 15, Conn.
Electrical and electronic instruments

International Optical Co., Inc., 45 Urban Ave., New Cassel, Waterbury, L. I., N. Y.
Lenses for mechanical, electrical and optical instruments, fine reticle engraving on glass; glass, quartz, pyrex, metal lapping; military optics; mirrors
(See advertisement on page 131)

International Powder Metallurgy Co., 439 W. Main St., Ridgeway, Pa.
Powdered metal parts

International Products Corp., 2554 Greenmount Ave., Baltimore 18, Md.

International Radiant Corp., 111 New York Ave., Westbury, L. I., N. Y.
Testing chambers and ovens

International Rectifier Corp., 1521 E. Grand Ave., El Segundo, Calif.
Photoelectric cells and dry disc rectifiers; sun batteries; germanium, selenium and silicon diodes and rectifiers
(See advertisement on page 24)

International Register Co., 2620 W. Washington Blvd., Chicago 12, Ill.
Timing controls, electrical apparatus
(See advertisement on page 147)

International Research & Development Corp., 797 Thomas Lane, P. O. Box 1707, Columbus 16, Ohio
Vibration analyzers; dynamic balancing machines; spin test units; ultra-speed centrifuges

International Resistance Co., 401 N. Broad St., Philadelphia 8, Pa.
Metallized and wirewound fixed and variable resistors including high voltage and high frequency types

International Telemeter Corp., 2000 Stoner Ave., Los Angeles 25, Calif.
Ceramic ferromagnetic cores for switching and storage; cores for magnetic read and record heads; television distribution system equipment

Ipsen Industries, Inc., 715 S. Main St., Rockford, Ill.
Industrial furnaces and gas atmosphere indicators

Ircal Industries, 2242 Sepulveda Blvd., Los Angeles 64, Calif.
Resistors

Iron Fireman Mfg. Co., Electronics Div., 2838 S. E. Ninth Ave., Portland 2, Oregon
Relays, vertical gyroscope

Islip Transformer and Metal Co., Inc., Foot of Beech St., Islip, N. Y.
Amplifiers

Isotope Products, Inc., Station B, Box O, Buffalo 7, N. Y.
Process control systems

Ithaca Scientific Instrument Co., Ithaca, N. Y.
Drawing instruments

J

J B L Instrument Co., Sycamore & Mill Rd., Clifton Heights, Pa.
Rotary transfer switches; stress and strain-gage switches

J-B-T Instruments, Inc., 441 Chapel St., New Haven 8, Conn.
Vibrating reed frequency meters; elapsed time meters; rotary-selector switches; temperature measuring instruments
(See advertisement on page 226)

JFD Manufacturing Co., Inc., 6101 16th Ave., Brooklyn 4, N. Y.
Miniature and sub-miniature variable trimmer coaxial tuning piston capacitors; L-C tuners; communication antennas, connectors

Jack Scientific Instrument Co., Bill, Solana Beach, Calif.
Cameras and camera control systems; programming and timing devices

Jackes-Evans Mfg. Co., 4427 Geraldine Ave., St. Louis 15, Mo.
Control valves

Jackson Electrical Instrument Co., 18 S. Patterson Blvd., Dayton 2, Ohio
Radio-electronic television instruments; marine equipment

Jacoby-Tarbox Corp., 808 Nepperhan Ave., Yonkers, N. Y.
Moisture meters; rotameters; sight flow meters

Jadow Inc., B., 860 Broadway at 17th St., New York 3, N. Y.
Dimensional gaging equipment; special lubricants; fractional-hp motors

Jaeger Watch Co., Inc., 304 East 45th St., New York 17, N. Y.
Automobile clocks; timepieces for aviation and marine; chronomatic tachometers and true airspeed indicators

Jaegers Optical Corp., A., 692 Merrick Rd., Lynbrook, N. Y.
Achromatic objectives; prisms; eyepieces; first surface mirrors; etc.
(See advertisement on page 128)

Jaidinger Mfg. Co., 1921 W. Hubbard St., Chicago 22, Ill.
Temperature controllers; relays; switches
(See advertisement on page 167

James-Pond-Clark. See Circle Seal Products

James Vibrapowr Company, 4036 N. Rockwell St., Chicago 18, Illinois
Choppers; power supply vibrators

Jamesbury Corp., 45 New St., Worcester 5, Mass.
Hydraulic devices

Jan Hardware Manufacturing Co., Inc., 75 N. 11th St., Brooklyn 11, N. Y.

Jansson Gage Co., 7444 Beaverland, Detroit 39, Mich.
Gage block sets; sine bars; tri squares; accessories

The Jaques Co., 67 Battermarch St., Boston 10, Mass.
Miniature fasteners
Metropolitan N. Y. Representative
R. S. Christie & Co.
175 Fifth Ave., New York 10, N. Y.
GRamercy 7-4226

Jarco Services, Inc., 415 S. Kenosha, Tulsa 20, Okla.
Level indicators and controls; analytical instruments; temperature transmitters and alarms; nameplates

Jarrell-Ash Co., 26 Farwell St., Newtonville 60, Mass.
Spectro-chemical analysis and X-ray diffraction instruments for use in metallurgy, research, quality control, trace element determinations, pathological investigations

Jarvis Co., Chas. L., Middletown, Conn.

Jarvis Electronics Corp., 6058 W. Fullerton Ave., Chicago 39, Ill.
Aircraft navigational instruments; resistors

Jarvis & Jarvis, Inc., 110 Pleasant St., Palmer, Mass.

Jeffrey Mfg. Co., 797 N. 4th St., Columbus 16, Ohio
Weighing, feeding, batching and proportioning equipment

Jeffries Transformer Co., 610 Turner St., Los Angeles 58, Calif.

Jelliff Manufacturing Corp., C. O., P. O. Box 68, Southport, Conn.
Indicating comparators

Jelrus Co., Inc., 136 W. 52nd St., New York 19, N. Y.
Electric furnaces; temperature control devices

Jem-O-Matic, Inc., 530 Cherry Lane, New Hyde Park, L. I., N. Y.

Jenkins Bros., 100 Park Ave., New York 17, N. Y.
Regulating valves

Jennings Radio Mfg. Corp., 970 McLaughlin Ave., P. O. Box 1278, San Jose 8, California
Vacuum capacitors; vacuum switches and relays; vacuum tube kilovolmeters

Jensen Tool Co., Henry C., 16 Mechanic St., Waltham 54, Mass.
Hairspring testers; toolmakers' test indicators

Jerpbak-Bayless Co., Solon Rd., Solon, Ohio
Indicating comparators

Jerguson Gage & Valve Co., Adams Street, Burlington, Mass.
Gages and valves for observation of liquids and levels
(See advertisement on page 113)

Jerrold Electronics Corp., 15th & Lehigh Ave., Philadelphia 32, Pa.
RF amplifiers; rf meters; sweep frequency generators; communication measuring instruments

Jessop Steel Co., Washington, Pa.

Jessup Eng. & Dev. Co., 3980 Superior St., Cincinnati 36, Ohio
Dimensional equipment; orifice plates; regulators

Jo-Bell Products, Inc., 5456 W. 111th St., Oak Lawn, Ill.
Liquid level alarms; magnetic proximity switches

Jo-Line Tools, Inc., 8442 Otis St., South Gate, Calif.
Torque wrenches

Johanson Mfg. Corp., 10 Rockaway Valley Rd., Boonton, N. J.
Variable and precision capacitors

Johansson Gage Co., See Swedish Gage Co. of America

Johnson Co., E. F., 2712 Second Ave., S. W. Waseca, Minn.
Tube sockets; jacks; plugs; knobs and dials; indicators; capacitors; transmitters, am, fm & ssb

Johnson Corp., 805 Wood St., Three Rivers, Mich.
Rotary pressure joints; steam separators; solenoid-operated valves; liquid level controls; high temperature boiler return systems

Johnson Engrg. Co., Inc., Welton V., 95 Summit Ave., Summit, N. J.
Instrument bearings; drives; shafts; pivots; tubing; special lubricants; small motors and regulators
(See advertisement on page 136)

Johnson Gage Co., 534 Cottage Grove Rd., Bloomfield, Conn.
Comparators and gages

Johnson Gas Appliance Co., 565 E. Ave., N. W., Cedar Rapids, Iowa
Laboratory furnaces

Johnson Scientific Instrument Co., 2915 Maples Ave., Berwyn, Ill.
Biological instruments, instrument-repair tools

Johnson Service Co., 507 E. Michigan St., Milwaukee 1, Wisc.
Automatic temperature and humidity control for heating, cooling, ventilating, air conditioning and industrial processes
(See advertisement on page 68)

Johnson-Williams, Inc., P. O. Box 307, Sta. A, Palo Alto 17, Calif.
Combustible gas indicators and alarm systems, portable and continuous; including accessories
(See advertiesment no page 100)

Johnston & Jennings Co. Oceco Div., 4700 W. Division St., Chicago 51, Ill.
Depth gages, valves

Jones Div., Howard B. Cinch Mfg. Co., 1026 S. Homan Ave., Chicago 24, Ill.
Connectors

Jones Electronics Co., M. C., 96 N. Main St., Bristol, Conn.
Standing wave meter

Jones & Lamson Machine Co., 160 Clinton St., Springfield, Vt.
Optical comparators; servomechanisms

Jones Motrola Corp., 432 Fairfield Ave., Stamford, Conn.
Tachometers, speed indicators and speedometers

THERMOCOUPLES and COMPONENTS

BASE·METAL
NOBLE METAL
GENERAL PURPOSE
SPRING LOADED
INJECTION MOLDING
GASKET
BUTTON
PENCIL TYPE
SWAGED MGO
MGO TUBING

Request Catalog Section 35-000 for data sheets and descriptive literature with prices.

Clarke H. Joy Co.
BAY VILLAGE, OHIO

For more information circle 384 on inquiry card

Jones Optical Works, A. D., 2400 Massachusetts Ave., Cambridge, Mass.
Electronic and optical elements; glass, quartz, opaque and transparent
(See advertisement on page 129)

Jordan Co., Inc., 3235 W. Hampton Ave., Milwaukee 9, Wis.
Control systems; servomechanisms

Jordan Electronics, Inc., 3025 W. Mission Rd., Alhambra, Calif.
Nuclear instruments for health monitoring systems industrial control, and measurement

Jordan Div. of OPW Corp., 6013 Wiehe Rd., Cincinnati 13, Ohio
Specialty valves; fittings, and assemblies; pressure regulators; temperature regulators

Jorgan Co., 65 Atlantic Ave., Rochester 7, N. Y.

Joy Co., Clarke H., 27005 Knickerbocker Rd., Bay Village, Ohio
Thermocouples and components; instrument panels
(See advertisement on page 252)

Joy Manufacturing Co., Electrical Connector Div., 1201 Mackland Ave., St. Louis 10, Missouri
Air compressors; electrical connectors; plastic and rubber molds; hard rubber molded parts; vacuum pumps

Joyro Associates, 488 Latham Road, Mineola, Long Island, N. Y.
Special slide rules

Judson-Bigelow, Inc., 171 Spring St., New York 12, N. Y.
Recording charts, ink, heat, pressure, electric
(See advertisement on page 53)

Julie Research Laboratories, 556 West 168th St., New York 32, N. Y.
Resistors; high precision resistance, voltage and current instrumentation

K

K-F Development Co., 2606 Spring St., Redwood City, Calif.
Af and rf amplifiers

Kaar Engineering Co., 2995 Middlefield Rd., Palo Alto, Calif.
Radio and navigation instruments

Kahl Scientific Instrument Co., Box 1166, El Cajon, Calif.
Thermometers; hydrometers; psychrometers; hygrometers

Kahle Engineering Co., 1310 Seventh St., North Bergen, N. J.
Machinery and equipment for making transistors; diodes; electron tubes; lamps; mercury switches

Kahn and Co., Inc., 541 Windsor, Hartford 1, Conn
Custom built hydraulic, pneumatic, and electrical-electronic test equipment

Kaiser Aircraft & Electronics Corp., Phoenix Elect. Div., 2222 W. Peoria Ave., Box 9098, Phoenix, Ariz., Toledo Elect. Div., 6255 Benore Rd., Box 437, Toledo 1, Ohio
Electronic, pneumatic & hydraulic system testers, flight simulators

Missile system testers; electronic test equipment; mobile electronic equipment; specialized test stands

Kansas City Laboratory Supply Co., 307 Westport Road, Kansas City 11, Mo.
Laboratory supplies

Kanthal Corporation, 7 Amelia Place, Stamford, Conn
Electric resistance alloys for high temperature heating

Karn Chemical Equipment Co., 518 Dickson Ave., Pittsburgh 2, Penna.
Thermowells
(See advertisement on page 200)

Karnish Instrument Sales & Service Inc., 3rd Ave. & Maple St., Lock Haven, Penna.
Indicators for airspeed, cabin pressure, rate of climb

Kates Co., W. A., 430 Waukegan Rd., Deerfield, Ill.
Automatic self-operated flow controllers; flow and ratio regulators

Rep—W. Pa., W. Va., Md. panhdle, Ohio bdr.
Sentinel Products Co. (Wayne B. Farley)
36 Beitzhoover Ave., Pittsburgh 10, Pa.
HEmlock 1-0774

Kato Engrg. Co., 1489-A First Ave., Mankato, Minn.
A-c generators; motor generators; frequency changing motor-generator sets; rotary converters; a-c motors, d-c motors; control cubicles
(See advertisement on page 142)

Kauffman-Lattimer Co., 230 N. Front St., Columbus 16, Ohio
Laboratory supplies

Kauke & Co., 1632 Pico Blvd., Santa Monica, Calif.
Missile telemetering systems; preamplifiers; filters

Kay Electric Co., 14 Maple Ave., Pine Brook, N. J.
Electronic Instruments

Kay Lab., See Kin Tel

Kaydel Moisture Gauges, 126 Liberty St., New York 6, N. Y.
Moisture meters

Kaye & MacDonald, Inc., 1115 Central Ave., West Orange, N. J.
Automatic controllers and regulators

Kearfott Company, Inc., 1378 Main Ave., Clifton, N. J.
High-precision servo system components; gyroscopic instruments; navigational systems based on gyros; airborne indicators for specific applications

Kearfott Co., Inc., Microwave Div., 14844 Oxnard St., Van Nuys, Calif.
Telemetering systems; spectrum analyzers; microwave equipment; filters

Keckley Co., O. C., 3400 Cleveland St., Skokie, Illinois
Steam and liquid control equipment including precision pressure regulators, temperature regulators, float valves, strainers, safety valves and solenoid valves

Keim Precision Mirrors, 1346 E. Colorado St., Glendale 5, Calif.
High vacuum evaporated optical coating; filters; one way mirrors

Keithley Instruments, Inc., 12415 Euclid Ave., Cleveland 6, Ohio
Electronic test instrumentation

Keller, Jr., Hugo P., 50 E. 42nd St., New York 17, N. Y.
Synthetic sapphire products; mercury
(See advertisement on page 110)

Keller Products, Inc., 41 Union St., Manchester, N. H.
Laminated products

Kellogg Switchboard & Supply Co., 79 West Monroe St., Chicago 3, Ill.
Relays; keyswitches; ac generators

Keinor Mfg. Co., Inc., 1355 Market St., San Francisco, Calif.

Kelvin Electric Co., 5907 Noble Ave., Van Nuys, Calif.
Precision resistors

Kemlite Laboratories, 1819 W. Grand Ave., Chicago 22, Ill.
Condenser discharge flashtubes

Kemp Mfg. Co., C. M., 405 E. Oliver St., Baltimore 2, Md.
Air and gas dehydrators; inert gas generators; flame arrestors and fire checks

Kemtron Electron Products, Inc., 14 Prime Place, **Newburyport, Mass.**
Silicon and germanium diodes

Kendall Controls Corp., 144 Moody St., Waltham, Mass.
Valve-operating devices; control valves; automatic **controllers**

Kendrick & Davis Co., Lebanon, N. H.
Instrument tools; countersinks and counter bores, **fractional-hp motors**

Kennedy & Co., D. S., Cohasset, Mass.

Ken-Rad Tube Lamp Co., Owensboro, Ky.

Kent Cliff Laboratories, Div. Torsion Balance Co., Monhegan Ave., Clifton, N. J.
Hardness testers; laboratory, analytical, precision, and pharmaceutical balances and weights

Kenyon Transformer Co., Inc., 840 Barry St., New York 59, N. Y.
Instrument and power **transformers; filters; chokes**

Kepco Laboratories, 131-38 Stanford Ave., Flushing 55, L. I., N. Y.
Power supplies, ac and dc; electronic equipment
Representative—Texas, Okla., Ark., La.
Arnold Barnes Co.
3603 Lemmon Ave., Dallas 19, Texas LA 6 87[illegible]
3913 East 2nd Place, Tulsa 12, Okla. MA 6 7707

Kessler Co., Frank 41-45 Forty-seventh St., Long Island City 4, N. Y.
Sub-miniature transformers
(See advertisement on page 205)

Kester Solder Co., 4201 Wrightwood Ave., Chicago 39, Ill.
Cored solders; solder preforms

Ketay Dept., Norden Div. of United Aircraft Corp., Commack, L. I., N. Y.
Pressure, vacuum, aircraft and military instrumentation, electrical, electronic components

Keuffel & Esser Co., Adams & Third Sts., Hoboken, N. J.
Surveying instruments

Kewaunee Mfg. Co., End So. Center St., Adrian, Mich.
Laboratory furniture

Key Electric Corp., 46 S. Bayles Ave., Port Washington, N. Y.
Digital magnetic tape recorders

Keystone Carbon Co., Inc., Saint Marys, Pa.
Self lubricating bearings and bushings; resistors; metal, graphite brushes

Keystone Products Co., 904-6 Twenty Third St., Union City, N. J.
Power supplies; transformers; magnetic amplifiers, components

Kieley & Mueller Inc., 64 Genung St., Middletown, N. Y.
Automatic diaphragm **control valves**; pressure regulators; float valves; liquid level displacement controllers

Philadelphia Representative
Arobone and Cline
Wilford Building, 33rd & Arch Streets
Philadelphia 4, Penn. EVergreen 2-6520

Pittsburgh Area Representative
W. A. Stoeltzing, Inc.
940 Western Ave., Pittsburgh 33, Pa.
ALlegheny 1-9400

Kimberly-Clark Corp., Neenah, Wis.

Kimble Glass Co., sub. of Owens-Illinois Glass Co., P. O. Box 1035, Toledo 1, Ohio
Glass apparatus; glass tubing; **thermometers; hydrometers**

Kin Tel, Cohu Electronics, 5725 Kearney Villa Rd., Box 623, San Diego 12, Calif.
D-c amplifiers; d-c power supplies; meter calibrators, galvanometers; microvolt ammeters; industrial and broadcast television equipment

Representative—Texas, Okla., Ark., La.
Arnold Barnes Co.
3603 Lemmon Ave., Dallas 19, Texas LA 6 87[illegible]
3913 East 2nd Place, Tulsa 12, Okla. MA 6 7707

New York Metropolitan Area Rep.
RMC Associates
236 E. 75th St., New York 21, TRafalgar [illegible]
391 Grand Ave., Englewood, N. J., LOwell 7 [illegible]

Philadelphia Area Representative
The I. E. Robinson Company
7404 West Chester Pike, Upper Darby, Pa.
SHerwood 8-1294, FLanders 2-7017

Kinetic Engineering Co., M-217, Delaware Trust Bldg., Wilmington 1, Del.
Flow-rate and proportioning measurement and control equipment.

Kinetic Instrument Co., 419 S. Beverly Pl., Lake Forest, Ill.
Laboratory apparatus; electrical and electronic instruments; relays

Kinetix Inst. Div., **Ketay Instrument Corp.**, Commack, L. I., N. Y.
Servomotors; **resolvers; synchros**

Kinevox Div. of Electromation Co., 1646 18th St., Santa Monica, Calif.
Synchronous magnetic film recorders; reproducers; bulk sound erasers; associated magnetic recording equipment

King Engineering Corporation, P. O. Box 625 Ann Arbor, Mich.
Manometers and filling media; pressure instruments
(See advertisement on page 120)

King Tester Corp., 440-44 N. 13th St., Philadelphia 23, Pa.

Kings Electronics, Inc., 40 Marbledale Rd., Tuckahoe, N. Y.

Kingston Electronic Corp., North St., Medfield, Mass.
Absorption analyzers; oscilloscopes;

Kinney Manufacturing Div., New York Air Brake Co., 3529 Washington St., Boston 30, Mass.
Vacuum pumps and valves

Kirk & Blum Manufacturing Co., 3120 Forrer St., Cincinnati 9, Ohio
Instrument panels and sheet metal assemblies; air supply, fume exhaust, dust control, dust collection systems; laboratory and production industrial ovens

Kirkland Co., H. R., 10 King St., Morristown, N. J.
Bulls eye lenses; indicating lamps; pilot lights; push button switches; annunciators

Kistler Instrument Corp., 15 Webster St., N. Tonawanda, N. Y.
Precision transducers for measurement of pressure, forces, vibration and acceleration
(See advertisement on page 150)

Philadelphia Area Representative
The I. E. Robinson Company
7404 West Chester Pike, Upper Darby, Pa.
SHerwood 8-1234, FLanders 2-7017

Kleinschmidt, Inc., County Line Rd., Deerfield, Ill.
Printed telecommunications equipment; air-borne teletypewriters, special components for automatic teletypewriter switching systems

Klett Mfg. Co., 179 E. 87th St., New York 28, N. Y.
Colorimeters

Klipfel Valves, Inc., Div. of Hamilton-Thomas Corp., 1075 Lincoln Ave., Hamilton, Ohio
Automatic regulating valves

Knights Company, James, Sandwich, Ill.
Crystals; crystal package oscillators, ovens; precision frequency standards

Kropp Inc., 1307 66th St., Emeryville, Calif.
High-precision electrical laboratory apparatus and testing devices

Koch & Co., F. A., 72 Spring St., New York 12, N. Y.
Laboratory supplies

Koch & Sons, H., Corte Madera, Calif.
Fiberglas products

Kocour Co., 4800 S. St. Louis, Chicago 32, Ill.
Electroplating solution tester; plating thickness gage; pH meter

Koehler Instrument Co., Inc., 168-56 Douglas Ave., Jamaica 33, N. Y.
Petroleum and paint testing equipment; polariscope tubes and accessories

Kohler Co., P. O. Box A, Kohler, Wisconsin
Plumbing fixtures, all-brass fittings; electric plants, air-cooled engines, heating equipment; precision controls

Koiled Kords, Inc., Box K, Hamden, Conn.
Retractile cords

Kollmorgen Optical Corp., 347 King St., Northampton, Mass.
Submarine and Industrial periscopes; borescopes; projection lenses; fire control devices for armed forces, viewing scopes; rifle scopes

Kollsman Instrument Corp., 80-08 45th Ave., Elmhurst 73, Long Island, N. Y.
Precision instruments for aircraft

Kontes Glass Co., Spruce St., Vineland, N. J.
Glass apparatus, instruments and parts

Kopp Scientific Inc., 15 Park St., Springfield, Mass.
Microchemical and micromechanical apparatus; blood test apparatus; automatic time switches

Korfund Co., Inc., 48-15 Thirty-second Place, Long Island City 1, N. Y.
Vibration instruments; vibration absorbers

Krembs & Co., 669 W. Ohio St., Chicago 10, Ill.
Fluxes for soldering, brazing and welding, coated welding electrodes

Krohn-Hite Corp., 580 Massachusetts Ave., Cambridge 39, Mass.
Oscillators; square wave generator; variable electronic filters; ultralow distortion power amplifiers; regulated power supplies

Krouse Testing Machine Inc., Box 3508, Columbus 14, Ohio
Fatigue testing machines

Kruger Instruments, Harold, P. O. Box 164, San Gabriel, Calif.
Mercury vapor detectors; ultraviolet photometers; gas analyzers; spectrophotometers
(See advertisement on page 156)

Kulka Electric Mfg. Co., 633 So. Fulton Ave., Mt. Vernon, N. Y.

Kunkle Valve Co., Ft. Wayne, Indiana
Pressure gages, bourdon tubing
(See advertisement on page 146)

Kurman Electric Co., Div., Norbute Corp., 191 Newel St., Brooklyn 22, N. Y.
Relays; vibrators; electronic control devices

Kurz-Kasch, Inc., 1421 So. Broadway, Dayton 1, Ohio
Custom molders of thermosetting and fluorocarbon plastics

Kushner Laboratories, Joseph B., 115 Broad St., Stroudsburg, Pa.
Surface tension measuring instruments

Kuss Industries, Inc., Tacony and Lewis Sts., Philadelphia 24, Pa.
Aluminum racks, consoles, and enclosures; electromechanical, mechanical components; assemblies; precision sheet metal components

Kwikheat Manufacturing Co., 3732 San Fernando Rd., Glendale 4, Calif.
Soldering irons

Kybernetes Corp., 9 E. 40th St., New York 16, N. Y.
Scanning systems; annunciators; process measurement and control equipment and components

L

L. A. B. Corp., P. O. Box 278, Skaneateles, N. Y.
Vibration Test equipment; torque measuring dynamometers

L and L Manufacturing Co., 804 Mulberry St., Upland, Chester, Pa.
Electric furnaces and ovens

LEL, Inc., 380 Oak St., Copiague, L. I., N. Y.
RF and IF amplifiers for radar and missile use

LR Electronics Corp., 3529 E. Colorado St., Pasadena, Calif.
Capacitors; relays; resistors; switches; transformers

L & R Manufacturing Co., 577 Elm St., Arlington, N. J.
Precision instrument cleaning machines; cleaning and rinsing compounds; fractional-hp motors

Labline, Inc., 3070 W. Grand Ave., Chicago 22, Ill.
Laboratory apparatus; testing equipment; components

Laboratory Construction Co., 1113-15 Holmes St., Kansas City 6, Mo.
Laboratory furniture and apparatus

Laboratory for Electronics, Inc., 75 Pitts St., Boston 14, Mass.
Oscilloscopes; digital voltmeters and frequency meters; microwave oscillators; portable GCA radar equipment

Laboratory Equipment Corp., Hilltop Rd., St. Joseph, Mich.
Carbon and sulphur determinators

Laboratory Furniture Co., Inc., Old Country Road, Mineola, L. I., N. Y.
Laboratory furniture

Laboratory Materials Co., 1330 E. Hyde Park Blvd., Chicago 15, Ill.
Laboratory supplies

Laboratory of Electronic Engineering, Inc., 413 L. St., N. W., Washington 1, D. C.
Regulated power supplies

Laboratory Optical Co., Box 387, Plainfield, N. J.
Optical inspection instruments; components; cameras

Lab-Tronics, Inc., 3656 N. Lincoln Ave., Chicago 13, Ill.
Laboratory apparatus; electrical and electronic instruments; components

Lafayette Instrument Co., N., 26 St., Layfayette, Ind.
Electrical and electronic instruments; motors; optical projectors; lie detectors; special timepieces

Lake Erie Electric Mfg., Inc., 2952 W. 22nd St., Erie, Pa.
Relay control equipment; electric switch boards and panel boards

Pittsburgh & Buffalo Representative
M. S. Jacobs & Associates, Inc.
810 Noblestown R., Pittsburgh 5, Pa. WA-1-6140
1807 Elmwood Ave., Buffalo 7, N. Y. DE-3229

LaMarche Mfg. Co., 3955-25th Ave., Shiller Park, Ill.
Constant voltage regulators, rectifiers

Lamb Electric Co., Lake St., Kent, Ohio
Fractional-hp motors

Lambda Electronics Corp., 11-11 131st St., College Point 56, New York
Power supplies

Laminations Co., 300 Main St., Stamford, Conn.
Pre-tooled laminations for electric motors, generators

Lammert & Mann Co., 260 N. Woods St., Chicago 12, Ill.
Vacuum pumps; air compressors

La Motte Chemical Products Co., Chestertown, Md.
pH control equipment; chemical controls; special reagents for research and analyisis; soil testing equipment

Lampkin Laboratories, Inc., IAC Div., Bradenton, Fla.
Radio-frequency meters; modulation meters

Landex Industries, Inc., 51 State St., Westbury, L. I., N. Y.
Coil forms, commutators, dielectric materials; bushings, circuits, instrument chassis; tubing; terminal strips & boards

Lancaster Glass Corp., Lancaster, Ohio
Electronic and industrial glassware; lenses; reflectors; glass and plastic parts

Lance Products, P. O. Box 251, Forest Hills 75, N. Y.
Adjustable frequency vibration tables; portable vibration amplitude meter

Land-Air Inc., 7444 West Wilson Ave., Chicago 31, Ill.
Electronic and electromechanical equipment for missiles and avionics

Landis & Gyr, Inc., 45 West 45th St., New York 36, N. Y.
Electric integrating meters; indicating and graphic demand meters for KW, KVA, reactive; prepayment meters; totalizing and remote; time switches; motor wound escapement or synchronous motor types with astronomic dials, miniature ball bearings

Landis Machine Co., 5th & Church Sts., Waynesboro, Penna.
Die heads; taps

Landsverk Electrometer Co., 631 Sonora Ave., Glendale, Calif.
Instruments and special components for X-ray and radioactivity measurements, including neutron dosimeters, standard roentgen meters
(See advertisement on page 160)

Langevin Div., The W. L. Maxon Corp., 47-37 Austell Pl., Long Island City, N. Y.
Amplifiers, transformers, power supplies; filters; oscillators

Lansdale Tube Co., Div. of Philco Corp., Lansdale, Pa.
Surface barrier transistors; junction transistors; VHF tuner diodes; X-band mixer diodes; subminiature tubes; receiving tubes; cathode-ray tubes

LaPine & Co., Arthur S., 6001 S. Knox Ave., Chicago 29, Ill.
Laboratory supplies

Lapp Insulator Co., Inc., Process Equipment Division, 39 Gilbert St., Le Roy, N. Y.
Corrosion-proof chemical porcelain ware; controlled volume pumps; piston-diaphragm pumps

Larson Instrument Co., 24 Orchard St., Tarrytown, N. Y.
Plug-in contact meter indicating controls; inkless 30 channel recorders

LaValee & Ide, Inc., Grape St., Chicopee, Mass.

Lavoie Laboratories, Matawan Freehold Rd., Morganville, N. J.
Ultra high frequency; precision frequency meters

Lawrence & Hill, Inc., 142 Main Ave., Watertown, N. Y.
Gages and gaging fixtures

Lawter Chemicals, Inc., 3563 Touhy Ave., Chicago 45, Ill.
Luminous and fluorescent chemicals and coatings

Leach Relay Div., Leach Corp., 5915 Avalon Blvd., Los Angeles 3, Calif.

Lear, Inc., 21-31 Ottawa, N. W., Grand Rapids, Mich.; 12272 Sky Lane, Los Angeles 49, Calif.
Electronic and mechanical aircraft accessories; aircraft radio equipment; radio compasses, etc.

Lectrohm, Inc., 5560 Northwest Highway, Chicago 30, Ill.
Wire wound resistors

Lectronic Research Labs., 715 Arch St., Philadelphia 8, Pa.
Electrical and electronic components, motors; cathode-ray tubes

Ledeen Mfg. Co., 3350 North Gilman Rd., El Monte Calif.
Air & hydraulic cylinders and valves; valve actuators air/hydraulic pumps

Pittsburgh Area Representative
Banks Engineering Co.
5407 Penn Ave., Pittsburgh 6, Pa.
MOntrose 1-5453 or 1-6746

Lee Spring Co., Div. Leetronics, Inc., 30 Main St. Brooklyn 1, N. Y.

Leeds & Northrup Co., 4901 Stenton Ave., Philadelphia 44, Pa.
Electrical laboratory instruments for research, teaching and testing; equipment for plant measurments and control; heat treating furnaces

Leetronics, Inc., Div., Lee Spring Co., Inc., 30 Main St., Brooklyn 1, N. Y.
Rotary solenoids, stepping switches

Lehigh Chemical Co., Chestertown, Maryland
Lubricants

Leighton Labs., H. W., Sunset Lane & York Rd. Hatboro, Pa.
Geiger-Mueller tubes; health monitoring chambers

Leiman Bros., Inc., P. O. Box 1339, 166 Christie St., Newark 5, N. J.
High vacuum pumps

Leitch-Huard Corp., Stark & Commercial Sts., Manchester, N. H.
Bearing testers; vacuum tube volt-ohmmeters; memory meters

Leitz Inc., E., 468 Fourth Ave., New York, N. Y.
Optical instruments

Leland Inc., G. H., 123 Webster St., Dayton 2, Ohio
Circuit selector switches, stepping relays, rotary solenoids

Leland Electric Div., A.M.F., 1501 Webster St., Dayton, Ohio
Motors and generators, standard or special

Lemert Engineering Co., Inc., 201 E. Jefferson St., Plymouth, Ind.
Riveters; custom and special fastening machines

Lenkurt Electric Co., 1105 Country Road, San Carlos, Calif.
Ultrasonic-frequency transformers, metallic dust cored inductors; electric wave filters

Lennard & Co., Inc., P. M., P. O. Box 56, Village Station, New York, N. Y.
Dust and humidity control hoods

Lenox Instrument Co., 2010 Chancellor St., Philadelphia 3, Pa.
Optical and technical instruments; periscopes; borescopes

Lenz Electric and Manufacturing Co., 1751 N. Western Ave., Chicago 47, Ill.
Wire; cable; cable harness assemblies, etc.

Leonard Inc., Wallace O., 373 S. Fair Oaks Ave., Pasadena, Calif.

Lepel High Frequency Labs., Inc., 55th St. & 37th Ave., Woodside 77, N. Y.
Laboratory furnaces; high-frequency apparatus

Lerco Electronics, Inc., 501 S. Varney St., Burbank Calif.
Terminals, turret and insulated; terminal board assemblies

Leroy M. E. Clausing Co., 8038 Monticello Ave., Skokie, Ill.
Coatings by high vacuum process — Beral, aluminum copper, gold, platinum, transparent mirrors; precision optical components — Schmidt systems, paraboloidal, spheroidal, hyperboloidal; optical flats

LeRoy Maugans Leather Co., 1403 Lincoln St., Anderson, Ind.

Leslie Co., Grant Ave., and Val Brook Ave., Lyndhurst, N. J.
Pressure reducing valves; pump governors; temperature regulators, pressure controllers; control systems; transmitters for pressure, temperature, level

Pittsburgh Representative
Harold G. Jones Co.
602 Empire Bldg., Pittsburgh 22, Pa.
ATlantic 1-8212

Lessells & Associates, Inc., 916 Commonwealth Ave., Boston 15, Mass.
Custom designers of special testing machines; electrical and mechanical control systems; strain gage instrumentation; recorders

Leupold & Stevens Instruments, Inc., 4445 N.E. Glisan St., P. O. Box 5082, Portland 13, Ore.
Recorders and indicators, for irrigation, power, waterworks, sewerage; equipment for hydraulic laboratories; snow-rain recorders, hydrographic accessories; transits, levels

Levin & Son., Inc., Louis, 3610 South Broadway Los Angeles 7, Calif.
Instrument lathes; micro-drill presses; micro-drills

Levinthal Electronic Products, Inc., 3180 Hanover St., Stanford Industrial Park, Palo Alto, Calif.
Radio and high-voltage power supplies; modulators microwave transmitter systems; scintillation crystals medical electronic instrumentation

Levy & Co., Max, Wayne Ave. & Berkley St., Philadelphia 44, Pa.
Precision rulings on glass; scales; grids, reticles, graticles

(See advertisement on page 172)

Lewis & Co., J. B., 3324 Main St., Hartford 5, Conn.
Motor controls; adjustable speed electronic exciters

Lewis Engineering Co., 52 Rubber Ave., Naugatuck, Conn.
Aircraft temperature instruments; selector switches connector blocks; thermocouples; resistance bulbs portable pyrometer and test potentiometers; thermocouple wire; special cables and wire

(See advertisement on page 191)

Lewis Spring and Mfg. Co., 2648 W. North Ave., Chicago 47, Ill.
Light, precision compression, extension and torsion springs; wire forms and light stampings

Lewis & Kaufman, Ltd., P. O. Box 337, Los Gatos Calif.
Power transmitting rectifiers, electron tubes

Levse Aluminum Co., Lake & Kilbourn Sts., Kewaunee, Wis.
Dial faces; instrument plates

Librascope, Inc., 808 Western Ave., Glendale 1, Calif.
Navigation, gun fire, bombing and fire control systems computers; data handling systems

(See advertisement on page 1)

Representative—Wash., Ore., Idaho, Mont.
Burt C. Porter Company
1209 Poplar Place, Seattle, Wash.
EAst 3-8330

Librascope, Inc., Burbank Div., 133 E. Santa Anita Burbank, Calif.
Magnetic digital computing components

Representative—Wash., Ore., Idaho, Mont.
Burt C. Porter Company
1209 Poplar Place, Seattle, Wash.
EAst 3-8330

Liebel-Flarsheim Co., 111 East Amity Rd., Cincinnati 15, Ohio
Diathermy equipment; electrosurgical apparatus metabolism test devices, x-ray accessories and timers

Lignum-Vitae Products Corp., 96-1P Boyd Ave., Jersey City 4, N. J.
Bearings, bushings, rollers

(See advertisement on page 49)

Lilie-Hoffman Cooling Towers, Inc., 1450 So. Vandeventer, St. Louis 10, Mo.
Cooling towers, mechanical and natural-draft types

Pittsburgh Area Representative
W. A. Stoeltzing, Inc.
940 Western Ave., Pittsburgh 33, Pa.
ALlegheny 1-9400

Lindberg Engineering Co., 2450 W. Hubbard St., Chicago 12, Ill.
Transformers; reactors

Lindberg Products Co., P. O. Box 308-C, Lakeport, Calif.
Sandblast guns for laboratory or shop

Linde Co., Division of Union Carbon Corp., 30 E. 42nd St., New York 17, N. Y.
Gas gages; gas flowmeters; oxygen regulators

Lindly & Co., 248 Herricks Rd., Mineola, L. I., N. Y.
Optical components; illuminators, scanners; control systems

Lindsay Products, Inc., 10639 Youngworth, Culver City, Calif.
Small and miniature, permanent magnet and other electrical dc motors

Line Electric Co., 271 S. 6th St., Newark 3, N. J.

Linear, Inc., State Rd. & Lerick St., Philadelphia 35, Pa.
Molded seals and gaskets

Ling Electronics, Inc., 9934 W. Jefferson Blvd., Culver City, Calif.
Electronically-driven vibration testing systems and components; cycling oscillators; high power audio systems

(See advertisement on page 218)

Link Aviation Inc., Binghamton, N. Y.
Aircraft navigational instruments

Link Engineering Co., 13845 Elmira St., Detroit 27, Mich.
Spring testers

Lipps Engineering, 1511 Colorado Blvd., Santa Monica Calif.
Recording heads

Liquidometer Corp., 36-16 Skillman Ave., Long Island City, 1, N. Y.
Liquid level gages

(See advertisement on page 113)

Liquid Scale Gauge Co., 100 N. First St., Minneapolis 1, Minn.
Liquid level indicating gages

Liquidvision Gauge & Control Corp., P. O. Box 51, Oceanside, L. I., N. Y.
Aircraft fuel quantity indicating systems, position indicating systems; liquid quantity gages

Littelfuse Inc., 1865 Miner St., Des Plaines, Ill.
Glass enclosed cartridge fuses, fuse holders, circuit breakers

(See advertisement on page 98)

Little Inc., Arthur D., Memorial Drive, Cambridge 42, Mass.
Chemical feeds and special equipment

Little Falls Alloys Inc., 189 Caldwell Ave., Paterson 1, N. J.
Special non-ferrous, spring and electric and electronic wire

Littleford Bros., 453 E. Pearl St., Cincinnati 2, Ohio
Control boards and housings

Litton Industries, Electronic Equipment Div., 336 N. Foothill Rd., Beverly Hills, Calif.

Litton Industries, Components Div., 5873 Rodeo Rd., Los Angeles 16, Calif.
Terminal Boards; precision potentiometers; printed circuits

Litton Industries of Maryland Inc., 4900 Calvert Rd., College Park, Md.

Livermont, Inc., Myrtle and Maple Aves., Monrovia Calif.
Positive torque control clutches for power screwdrivers and measuring instruments

Loe Engineering Co., 237 N. Fair Oaks, Pasadena, Calif.
Gas chromatography apparatus

(See advertisement on page 55)

Logan Engineering Co., Aridifier Div., 4901 W. Lawrence Ave., Chicago 30, Ill.
Compressed air and gas separators

Logansport Machine, Inc., 40 Payson Rd., Logansport Ind.

Logeman Co., C. W., 633 Bergen St., Brooklyn 38, N. Y.
Metering and proportioning pumps; homogenizers

Lonergan Co., J. E., 205 Race St., Philadelphia 6, Pa.
Pressure gages

Loral Electronics Corp., 825 Bronx River Ave., New York 72, N. Y.
Remote and machine control equipment, digital computers

Lord Mfg. Co., 1635 W. 12th St., Erie 6, Pa.
Vibration and shock control mountings for instruments and airborne electronic equipment; flexible couplings

Los Angeles Scientific Instr. Co., 2451 Riverside Dr., Los Angeles 39, Calif.
Planimeters; integrators, collimators; pantographs optical testing instruments

(See advertisement on page 138)

London Instr. Div., See Land Air, Inc.

Lucian Laboratories, 202 Darby Rd., Llanerch, Havertown, Penna.
Smoke and dust detection measurement and recording optical follower for curve following, recording and reproducing

Lucifer Furnaces, Inc., 374 Easton Rd., Neshaminy Penna.
Furnaces and ovens

Ludwig Inc., F. G., Coulter Rd., Old Saybrook, Conn.
Photocopying machines

Lufkin Rule Co., 1730 Hess Ave., Saginaw, Mich.
Precision tools and measuring tapes

Luma Electric Equipment Co., 1607 Coining Drive Toledo 1, Ohio
Soldering irons; demagnetizers; marking devices

Lumenite Electronic Co., 407 S. Dearborn St., Chicago 5, Ill.
Photoelectric controls

Luther Manufacturing Co., 7312 Varna Ave., N. Hollywood, Calif.
Electronic and instrument components; motors; syncros, relays, electric and electronic windings

Luxo Lamp Corp., 102 Columbus Ave., Tuckahoe N. Y.
Worklamps

Lyman Electronic Corp., 12 Cass St., Springfield, Mass.
Radio test instruments

Lynn, Robert M., P. O. Box 745 Arcadia, California
Optical parts, optical tools; toolmakers microscopes, interference filters; iris diaphragms
(See advertisement on page 203)

M

MB Mfg. Co., A division of Textron Inc., P. O. Box 1825, New Haven 8, Conn.
Electrical instruments; vibration test equipment; displacement pickups

M. V. M. Inc., 45-50 34th St., Long Island City 1, N. Y.
Imported receiving tubes and microphones

Macalaster Bicknell Co., 243 Broadway, Cambridge 39, Mass.
Laboratory glass apparatus

Macarr, Inc., 2543 Boston Rd., Bronx, N. Y.
Power supplies; components

Macbeth Corp., Little Britain Rd., Newburgh, N. Y.
Hydrogen ion meters

Machine Specialties, 4027-33 N. Kedzie Ave., Chicago 18, Ill.
Machinery Electrification, Northboro, Mass.
Remote and machine tool control systems; graphic panels

Mack Electric Devices, Inc., 38 Glenside Ave., Wyncote, Pa.
Mercury plunger type relays; package temperature alarm systems

Mack Electronics, Div. of Mack Trucks, Inc., 40 Leon St., Boston 15, Mass.
Magnetic core transistorized counters, shift register elements; computer components

MacKenzie Walton Co., 478 Pawtucket Ave., Pawtucket, R. I.
Seamless, precision tubing

MacLeod & Hanopol, 10 Roland St., Charlestown 29, Mass.
Test equipment

Maganaflux Corp., 7300 W. Lawrence Ave., Chicago 31, Ill.
Nondestructive testing equipment and materials: magnetic particle, fluorescent magnetic particle, fluorescent penetrant, dye penetrant, ultrasonic, electronic and eddy current methods
(See advertisement on page 18)

Magnatran Incorporated, 248 Schuyler Ave., Kearny, N. J.
Transformers; magnetic components

Magnatrol Valve Corp., 67 Fifth Ave., Hawthorne, N. J.
Valves, solenoid; sizes from ¼" to 3", packless construction, normally closed or normally open type; pressures to 300 psig
Cleveland Representative
Glatte & Company
2012 W. 25th St., Cleveland 13, Ohio
TOwer 1-0897

Magnavox Co., Inc., 2131 Bueter Rd., Fort Wayne 4, Indiana
Radio; television; high fidelity phonographs; electronic, electromechanical, electrochemical, test and electronic component equipments

Magnecord Div. of Midwestern Instruments, 1101 S. Kilbourn Ave., Chicago 24, Ill.
Magnetic tape recorders

Magnecraft Electric Co., 3352 W. Grand Ave., Chicago 51, Ill.
Relays

Magnet Wire Division, Essex Wire Corp., Ft. Wayne, Ind.
Magnet wire; bare copper and aluminum wire

Magnetic Amplifiers Inc., 632 Tinton Ave., New York 55, N. Y. West Coast Div., 3160 W. El Segundo Blvd., Hawthorne, Calif.
Magnetic amplifiers; servo-systems; saturable transformers; saturable reactors; regulated power supplies; transistor curve tracers; variable speed drives; phase analyzers

Magnetic Analysis Corp., 42-44 12th St., Long Island City 1, N. Y.
Magnetic inspectors for steel bars and tubing, (including stainless steel); comparators for ferrous and non-ferrous materials; demagnetizers

Magnetic Controls Co., 6401 Cambridge St., Minneapolis 16, Minn.
Magnetic amplifiers; servo amplifiers; ac to dc converters

Magnetic Industries, Inc., 2640 Huldy St., Houston, Texas
Magnetic amplifiers; servomechanisms

Magnetic Instrument Co., 546 Commerce St., Thornwood, N. Y.
Systems and electronic devices for level, flow, temperature, pressure, etc., for process and military

Magnetic Powders, Inc., Johnsonburg, Penna.
Iron powders for electronic components and sintered presed parts

Magnetic Research Corp., 3160 W. El Eegundo Bvld., Hawthorne, Calif.
D-c power supplies; amplifiers, converters; magnetic regulators; pulse generators; servo amplifiers; servo systems

Magnetic Shield Div., Perfection Mica Co., 1322 N. Elston Ave., Chicago 22, Ill.
Wrappable magnetic shielding foils; magnetic cable shielding; tube shields and containers; magnetic tape preserver containers; special shields to specification
(See advertisement on page 118)

Magnetico Inc., 6 Richter Court, East Northport, L. I., N. Y.
Toroidal coils; transformers; filter chokes; delay line coils; magnetic amplifiers

Magnetics, Inc., P. O. Box 391, Butler, Pa.
Computer memory cores, magnetic shields and laminations

Magnetics Research Co., 255 Grove St., White Plains, N. Y.

Magnetrol, Inc., 2110 S. Marshall Blvd., Chicago 23, Ill.
Liquid level and flow controls,—pneumatic or electric
(See advertisement on page 112)

Magnuson Engineers, Inc., 509 Emory St., San Jose 10, Calif.

Maguire Industries, See Thordarson Meissner

Mahady Co., E. F., 857 Boylston St., Boston 16, Mass.
Laboratory supply house

Maida Develp., Washington & Academy, Hampton, Va.

Maico Tool & Mfg. Co., 4025 West Lake Street, Chicago 24, Ill.
Instrument and electronic hardware

Mallory & Co., Inc., P. R., 36 S. Gray St., Indianapolis 6, Ind.
Dry batteries; electrolytic capacitors; electrical contacts; special metals; power supplies

Mallory & Co., Inc., P. R., Battery Div., N. Tarrytown, N. Y.
Mercury batteries

Management Assistance, Inc., 40 Exchange Place, New York 5, N. Y.
Computers and data processing expansion devices

Manning, Maxwell & Moore, Inc., 250 E. Main St., Stratford, Conn.
Gages; valves; industrial instruments; electronic instruments for measurement, transmission and control; aircraft products; hoists, cranes and other materials handling products

Manostat Corporation, 20-26 N. Moore St., New York 13, N. Y.
Vacuum and pressure regulating equipment; calibrators for flow, temperature

Manross & Sons, F. N., Div., Associated Spring Corp., George St., Bristol, Conn.

Mansfield & Green, Inc., 1051 Power Ave., Cleveland 14, Ohio
Pressure testing instruments
(See advertisement on pages 144, 149)

Manson Laboratories, Inc., 207 Greenwich Ave., Stamford, Conn.
Pulse modulators; power supplies; tube testing equipment; crystal frequency synthesizers; wire cable tester; pulse generators

Mantec, Inc., 126 Maryland St., El Segundo, Calif.
Environmetal test equipment; temperature test chambers, humidity chambers

Manufacturers Engrg. & Equipment Corp., York Road & Sunset Lane, Hatboro, Penna.
Gas and optical densitometers

Marac Machinery Corp., 1819 Broadway, New York 23, N. Y.

Marathon Battery Co., Wausau, Wis.
Dry cells and dry cell batteries

Marble-Card Electric Corp., Gladstone, Mich.
Fractional-hp motors

Marchant Calculators, Inc., see Smith-Corona Marchant Inc.

Marco Industries Co., P. O. Box 110, Anaheim, Calif.
Subminiature neon indicator lamps

Marco Industries Inc., Depew, N. Y.
Instrument and servomechanism motors

Marconi Instruments, Ltd., 111 Cedar Lane, Englewood, N. J.
Electrical and electronic instruments; frequency standards; amplifiers

Marine Compass Co., Pembroke, Mass.
Marine navigational instruments

Marine and Industrial Products Co., 337 W. Walnut St., North Wales, Penna.
Relief and pop safety valves

Marion Electrical Instrument Co., Stark St. Gate Grenier Fld., Manchester, N. H.
Electrical indicating instruments; relays

Maris Co., John M., 2100 Arch St., Philadelphia 2, Pa.
Laboratory apparatus

Mark-Tex Corp., 453 W. 17th St., New York 11, N. Y.
Marking devices

Marks Polarized Corp., 153-16 10th Ave., Whitestone, L. I., N. Y.
Optical components and materials

Marline-Rockwell Corp., 401 Chandler, Jamestown, N. Y.
Ball and roller bearings

Marsco Manufacturing Co., 2909 S. Halsted St., Chicago 8, Ill.
Glass fabrication to close tolerances; tempering of glass for increased resistance to physical, thermal shock; custom drilling, ceramic decoration, shaping

Marsh Corp., Jas P., (Marsh Instr. Co., Sales Affiliate), 3501 Howard St., Skokie, Ill.
Industrial gages; dial indicating thermometers; needle valves; refrigeration regulating valves; heating specialties
(See advertisement on page 147)

Marshall Co., C. & E., 1445 West Jackson Blvd., Chicago 80, Ill.
Manufacturers and distributors of jewelers', watchmakers' and engravers supplies

Marshall Co., L. H., Station B, Columbus, Ohio
Thermocouples

Marshall Instruments, Inc., 14203 Bessemer St., Van Nuys, Calif.
Dial and special-type thermometers
(See advertisement on page 148)

Marshalltown Mfg. Co., 800 E. Nevada St., Marshalltown, Iowa
Pressure gages and indicating thermometers
Pittsburgh Representative
Harold G. Jones Co.
602 Empire Bldg., Pittsburgh 22, Pa.
ATlantic 1-8212

Martin-Decker Corp., 3431 Cherry Ave., Long Beach 7, Calif.
Industrial scales; tensiometers

Martindale Electric Co., Box 617, Edgewater Branch, Cleveland 7, Ohio
Testing and repair instruments and equipment for electric motors and generators

Marvel Engineering Co., 7227 N. Hamlin Ave., Chicago 45, Ill.
Filters for hydraulic oils; coolants; lubricants; and low pressure circulating systems

Marx Co., Clarence J., P. O. Box 4033, Cleveland 23, Ohio
Speed measuring instruments
(See advertisement on page 187)

Maryland Electronic Mfg. Corp., 5009 Calvert Rd., College Park, Md.

Maryland Etching Co., Eudowood Lane, Towson 4, Md.

Mason Electric Corp., 3839 Verdugo Rd., Los Angeles 65, Calif.
Rotary and toggle switches

Mason Instrument Co., 29 Elm Ave., Mt. Vernon, N. Y.
Optical pyrometers; furnace temperature controls

Mason-Neilan, Division of Worthington Corp., 55 Nahatan St., Norwood, Mass.
Industrial control equipment for pressure, temperature, flow, liquid level, combustion and ratio; diaphragm control valves; pressure and vacuum regulators; level controllers; pump speed governors; pump pressure regulators; pipe strainers
(See advertisement on page 67)

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Mass Instruments, 84-51 Beverly Rd., Kew Gardens 15, L. I., N. Y.
Photoelectric colorimeters, photometers

Massa Div. of Cohu Electronics, Inc. 5 Fottler Rd. Hingham, Mass.
Electroacoustic instruments; oscillographs; transducers

New York Metropolitan Area Rep.
RMC Associates
236 E. 75th St., New York 21, TRafalgar 9-2023
391 Grand Ave., Englewood, N. J., LOwell 7-3933

Mast Development Co. Inc., 2212 E. 12th St., Davenport, Iowa
Custom-built instruments for research and government

Master Electric Co., 126 Davis Ave., Dayton 1, Ohio
Electric motors; gearmotors; variable speed drives, unibrake motors; fluid-drive motors

Mastercraft Instrument Co., P. O. Box 697, Dubuque Iowa
Milliammeters; millivoltmeters; pyrometers

MasterSon Engrg. Co., P. O. Box 24016, Los Angeles 24, Calif.
Laboratory presses; contract machining

Matisa Equipment Corp., 1020 Washington Ave., Chicago Heights, Ill.
Aircraft instruments; process measurement and control instruments

Matthews Instrument Co., 1350 Burlington Ave., Bristol, Conn.
Odometers

Maurer, Inc., J. A., 37-01 31 St. Long Island City 1, N. Y.
Motion picture cameras

Maurey Instrument Corp., 7924 S. Exchange Ave., Chicago 17, Ill.
Toroidal coils; precision resistors

Maveg Machine Sales Association, Chamber of Commerce Bldg., Long Island City, N. Y.
Dilatometers, dual comparators

Maxson Corp., W. L., 475 Tenth Ave., New York 18, N. Y.
Aircraft instruments, computing machines; integrators; gyro stabilizers; aircraft and naval current controls

Maxson Instrument Div. of W. L. Maxson Corp., 460 W. 34 St., New York, N. Y.
Flowmeters; phasemeters; power oscillators; IF amplifirs; accelerometers; acceleration-sensitive switches

Mayer Co., George J., 546 E. Market St., Indianapolis 4, Ind.
Nameplates

(See advertisement on page 127)

Maymer Corp., 1961 W. 112th St., Cleveland 2, Ohio
Scales, dials and name plates

(See advertisement on page 79)

Mayne Products Co., 324 Harries Bldg., Dayton 2, Ohio

McAlear Manufacturing Co., 1901 S. Western Ave., Chicago 8, Ill.
Pressure regulators, diaphragm control valves; float valves; special valves, pipeline strainers

McCoy Electronics Co., Mt. Holly Springs, Pa.
Crystals; crystal ovens

McDanel Refractory Porcelain Co., 510 Ninth Avenue, Beaver Falls, Pa.
Porcelain insulators, components; pyrometers

McDonnell & Miller, Inc., 3500 N. Spaulding Ave., Chicago 18, Ill.
Float-operated switches; float-operated valves; pressure actuated valves

McDonnell Odometers Co., 3501 So. Kedzie Ave., Chicago 32, Ill.
Counters

McGill Mfg. Co., Inc., Valparaiso, Ind.

McHugh & Son, Raymond F., 4716 Pearson Ave., P. O. Box 6025, Philadelphia 14, Pa.
Indicating pyrometers; thermocouples

(See advertisement on page 256)

McIntosh Equipment Corp., Walker, Crosweller Div 21 Park Row, New York 38, N. Y.
Sight flowmeters

McKenna Labs., 2503 Main St., Santa Monica, Calif.
Ultrasonic equipment: transducers, generators, cleaning machines; cleaning, processing and experimental systems

(See advertisement on page 59)

McKesson & Robbins, Inc., 1706 First Ave., Birmingham 3, Ala.
Laboratory supplies

McLean Engineering Labs., 70 Washington Rd., P. O. Box 228, Princeton, N. J.
Blowers and fans for cooling electronic equipment

(See advertisement on page 46)

McNeill Engineering Co., 4057 West Van Buren St., Chicago 24, Ill.
Smoke alarms

McPherson Precision Instruments, Paul M., 527 Main St., Acton, Mass.
Laboratory supply house

McShan Development Corp., 63 Cutter Mill Road Great Neck, L. I., N. Y.
Audio frequency standards; filters; components

Mead Specialties Co., 4114 North Knox Ave., Chicago 41, Ill.
Air cylinders; valves; impact hammers; timers; work feeders

Measurements Corp., Boonton, N. J.
Radio frequency testing and measuring devices

(See advertisement on page 97)

Mechanical Industries Products Co., 217 Ash St., Akron 8, Ohio
Thermostats

Mechanical Products Corp., 168 N. Ogden Ave., Chicago 7, Ill.
Metering pumps; automatic dispensers

Mechaponents Division, Servomechanisms, Inc., 1000 El Segundo Blvd., Hawthorne, Calif.
Miniature and sub-miniature transformers, filters and coils

Mechtronics Co., 423 W. Coulter St., Philadelphia 44, Pa.
Special automated devices; engineering services

Meck Industries, John, Plymouth, Ind.

Medical Electronics Development Co., 400 Northern Blvd., Great Neck, L. I., N. Y.
Objective blood pressure measuring instruments; instruments for medicine

Meikle Manufacturing Co., 1335 S. MacArthur Blvd. Springfield, Ill.
Pivots and staffs for meters

Melco Products Co., Inc., 361 Fifth Ave. So., Minneapolis 15, Minn.
Transformers

Meletron Corp., 950 N. Highland Ave., Los Angeles 38, Calif.
Pressure operated switches

Menlo Research Lab., 538 Phelan Ave., San Jose Calif.
Nucleonic and ultraviolet instrumentation and components; grain testers

Menlo Park Engineering, 721 Hamilton Ave., Menlo Park, Calif.
Microwave instrumentation and equipment

Mepco Inc., 37 Abbett Ave., Morristown, N. J.
Standard and special resistors

Mercoid Corp., 4201 Belmont Ave., Chicago 41, Ill.
General purpose, weather-resistant, explosion-proof mercury-switch equipped controls for pressure, differential pressure, temperature, liquid level, mechanical movement; transformer relays

(See advertisement on page 184)

St. Louis Representative
Fillo Sales & Engineering Co.
4101 Chouteau Ave., St. Louis, Mo.
JEfferson 1-0477

Mercon Regulator Co., 2357 N. 29th St., Milwaukee 10, Wis.
Power plant specialties in regulation of pressure, level, rate of flow, proportioning and temperature

Mercury Contacts, Inc., P. O. Box 615, Far Hills Station, Dayton 9, Ohio
Relays and switches

Mercury Electronic Co., Box 450 B, Red Bank, N. J.

Mercury Glass Co., Pleasantville, N. J.
Glass tubing

Meriam Instrument Co., 10920 Madison Ave., Cleveland 2, Ohio
Manometers; accessories; specialized processing of manometric fluids

(See advertisement on pages 93, 121)

Rep—Lower Wis., No. Ill., No. Ind.
Paul B. Shannon Co.
10336 S. Western Ave., Chicago 43, Ill.
BEverly 3-3392

Merit Transformer Corp., 4427 N. Clark St., Chicago, Ill.
Transformers, coils and reactors, electrical windings

Merkle Korff Gear Co., 214 North Morgan St., Chicago 7, Ill.
Motorized speed reducers, induction, synchronous, reversing, dc universal motors

Merkle-Metal Products Co., 1010 W. Lake Street, Chicago 7, Illinois

Merrick Scale Mfg. Co., 180-186 Autumn St., Passaic, N. J.
Automatic continuous weighing machines

Merritt Engrg. & Sales Co., Inc., 120 S. Niagara St., Lockport, N. Y.
Consistency controls

Merz Engineering Inc., 200 S. Harding St., Indianapolis 7, Ind.
Gages and gaging fixtures

Metal & Alloy Specialties Co., Inc., 1875 Elmwood Ave., Buffalo 7, N. Y.

Metal Craft Co., 1630 E. 40th St., Cleveland 3, Ohio
Aluminum and steel electronic instrument tube-testing carrying cases; aluminum cases for traffic signal equipment

Metal & Thermit Corp., Rahway, N. J.
Aluminum, brass, copper, steel, stainless steel, Monel, nickel, and Inconel products

Metal Specialty Co., B & O and Este Ave., Cincinnati, Ohio

Metal Textile Corp., Electronics Div., Roselle, N. J.
Filters; shock mounts; separators; RF shielding gaskets

Metalab Equipment Co., Div. of Norbute Co., 270 Duffy Ave., Hicksville, L. I., N. Y.
Laboratory furniture

Metalphoto Corp., 6811 Superior Ave., Cleveland, Ohio
Photosensitive anodized aluminum plates; dial faces, fluorescent chemicals

Metalsalts Corp., 200 Wagraw Rd., Hawthorne, N. J.
Mercury

Metavac, Inc., 45-68 162 St., Flushing 58, N. Y.
Precision electronic components; wave guide resistance elements; metallized glass attenuator plates; disc and coaxial resistors, optical coatings (reflective, non-reflective)

(See advertisement on page 170)

Meters, Incorporated, 5353 N. Keystone Ave., Indianapolis 20, Ind.
Electrical indicating instruments

Metlab Co., 1000 E. Mermaid Lane, Philadelphia 18, Pa.

Metrogram Corp. of America, P. O. Box 137, Burlington, Vt.
Automatic check weighing machines; over and under indicating scales

Metrol, Inc., 17 E. Holly St., Pasadena, Calif.
Electromagnetic nondestructive test equipment for metal quality control

Metrolog Corp., 161 N. Halstead St., Pasadena, Calif.
Computers, process control systems; servomechanisms flowmeters

Metron Instrument Co., 432 Lincoln St., Denver 9, Colo.
Comparator gages; electric tachometers; timers; chronographs

Mettler Instrument Corp., Box 242, Hightstown-Princeton Rd., Hightstown, N. J.
Analytical balances and scales, direct reading

Metzger & Son, F. F., 2600 N. 6th St., Philadelphia 33, Pa.
Extensometers and gages

Meyer-Opticraft, 39 W. 60th, New York 23, N. Y.

Meyer Governor Co., 284 Baker Bldg., Minneapolis 2, Minn.
Long-distance recording, indicating, and contact-making instruments; gage pulsation protectors

Meyer Scientific Supply Co., Inc., 221 Atlantic Ave., Brooklyn 2, N. Y.
Laboratory apparatus

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Manufacturers

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Meyercord Co., 5323 W. Lake St., Chicago 44, Ill.

Mica Insulator Div., of Minnesota Mining & Mfg. Co., Box 1076, 797 Broadway, Schenectady 1, N. Y.
Ceramic bushings; mica and phenolic tubing; terminal boards; dielectric materials

Micamold Electronics Manufacturing Corp., 1087 Flushing Ave., Brooklyn 37, N. Y.
Capacitors; filters; delay lines

Michigan Electronics, Inc., 854 N. Rockwell St., Chicago 22, Ill.
Tape recorders, components

Michigan Tool Co., 7171 E. McNichols Rd., Detroit 12, Mich.
Machines for gear forming

Mico Instrument Co., 80 Trowbridge St., Cambridge 38, Mass.
Precision mechanical and electromechanical instruments and devices for laboratory, model shop, prototype department and home workshop

Micro Balancing, Inc., 191 Herricks Road, Garden City Park, L. I., N. Y.
Dynamic balancing machines; photoelectric controls

Micro-Circuits Co., New Buffalo, Mich.
Electrically conductive coatings, etch and solder dip resist coatings for shielding and printed circuits

Micro Gee Products, Inc., 6319 W. Slauson Ave., Culver City, Calif.
Simulation tables; signal and flight simulators; servomechanisms; displacement indicators and recorders

Micro Master Co., 2733 N. Pulaski Rd., Chicago 39, Ill.
Dial indicators and taper gages

Micro Metallic Corp., 30 Sea Cliff Ave., Glen Cove, N. Y.
Corrosion-resistant filter media; chemical, petrochemical, pharmaceutical filters

Micro Metric Instrument Co., 21509 McCracken Rd., Box 884, Cleveland 22, Ohio
Chemical and biological instruments

Micro-Poise Engrg. & Sales Co., 14851 Grand River Ave., Detroit 27, Mich.
Balancing machines

Micro Switch Div., Minneapolis-Honeywell Regulator Co., Spring Street, Freeport, Illinois
Snap action switches; mercury switches

Microchemical Service, 44-27 Douglaston Pkway, Douglaston, N. Y.
Laboratory equipment

Microchemical Specialties Co., 1825 Eastshore Highway, Berkeley 10, Calif.
Laboratory apparatus; components

Microdot, Inc., 220 Pasadena Ave., South Pasadena, Calif.
Miniature coaxial cables, connectors and assemblies; teflon cables

Microloc Corp., 5300 104th St., Los Angeles 45, Calif.
Aircraft instruments

Micromat Co., 548 Piermont Ave., Hillsdale, N. J.

Micrometrical Manufacturing Co., 345 S. Main St., Ann Arbor, Mich.
Surface finish gages; bearing testers

Micron Gear Manufacturing Co., 73 Rushmore St., Westbury, L. I., N. Y.
Instrument gears

Microphase Corp., P. O. Box 1116, Greenwich, Conn.
R-f filters

Microtech Corp., 200 W. Colorado St., Pasadena 1, Calif.
Precision ground, instrument and miniature ball bearings

Microtech Services Co., Box 121, Berkeley, Calif.
Ultramicro balances

Microtran Company, Division of Crest Laboratories, Inc., 145 E. Mineola Ave., Valley Stream, L. I., N. Y.
Miniaturized transformers and reactors

Microwave Development Labs, Inc., 92 Broad St., Babson Park 57, Wellesley, Mass.
Microwave instrumentation and components

Mid-Century Instrumatic Corp., 611 Broadway, New York 12, N. Y.
Electronic computers; multipliers; recording oscillographs

Mid-West Dynamometer & Engrg. Co., 3100 River Road, River Grove, Ill.
Dynamometers

Midwestern Instruments, Inc., 41st and Sheridan Rd., P. O. Box 7186, Tulsa, Okla.
Data processing systems; oscillographs; amplifiers; galvanometers

Mil Instrument Corp., 92-15 172nd St., Jamaica, L. I., N. Y.
Electrical indicating instruments, galvanometers

Miljan, Inc., Box 396, 15506 S. Lakewood Blvd., Paramount, Calif.

Mill-Rose Co., 1985 E. 59th St., Cleveland 3, Ohio
Brushes for cleaning

Millen Mfg. Co., James, 150 Exchange St., Malden 48, Mass.
Radio test instruments, special electronic components

Miller & Associates, David, P.O. Box 572, Beverly Hills, Calif.
Portable drafting machines
(See advertisement on page 257)

Miller Dial and Name Plate Co., 4400 N. Temple City Blvd., El Monte, Calif.
Etched, lithographed, and silk screened nameplates and panels; edge-lighted panels

Miller Fluid Power Div., Flick-Reedy Corp., 2040 N. Hawthorne Ave., Melrose Park, Ill.
Air & hydraulic cylinders, boosters, accumulators

Miller-Harris Instrument Co., 601 E. Ogden Ave., Milwaukee 2, Wis.
Automatic time controllers, electric clockworks

Miller, M. C., Box 721, Allendale, N. J.
Electrical instruments

Miller Labs., August E., 9226 Hudson Blvd., North Bergen, N. J.

Miller-Robinson Co., 7007 Avalon Blvd., Los Angeles, Calif.
Pressure switches for specialized applications involving unusual conditions of G-loading or vibration, special Bourdon tube design and fabrication

Miller & Sons, R. F., Harvard, Nebr.
Fault-locating instruments

Millers' Falls Co., 57 Wells St., Greenfield, Mass.
Machine shop gages; power tools

Milltest Co., 88 Madison Ave., Hempstead, L. I., N. Y.

Millivac Instrument Div. of Cohu Electronics, Inc., 2315 Second Ave., Carman, Schenectady 6, N. Y.
Special electronic instruments (dc & RMS VTVMs, dc recorders, etc.)
Representative—Texas, Okla., New Mexico
Arnold Barnes Co.
3603 Lemmon Ave., Dallas 19, Texas LA 6-8735
3913 East 2nd Place, Tulsa 12, Okla. MA 6-770

Milsco Mfg. Co., 2758 N. 33 St., Milwaukee 10, Wisc.

Milton Roy Co., 1300 E. Mermaid Lane, Philadelphia 8, Pa.
Positive displacement controlled-volume pumps; chemical feed systems

Minarik Electric Co., 224 E. 3rd St., Los Angeles 13, Calif.
Timers, motor controllers and regulators

MinAtron Corp., 3 Cliveden Place, Belle Meade, N. J.
Differential transformers; impulse generators; instrumentation systems

Minco Products, Inc., 740 Washington Ave. North, Minneaplois 1, Minn.
Potentiometers; resistance temperature sensors; test equipment

Mine Safety Appliances Co., 201 N. Braddock St., Pittsburgh 8, Pa.
Instruments for air pollution, gas analysis, humidity, sound
(See advertisement on pages 13, 257)

Mine & Smelter Supply Co., 1422-17th St., Denver, Colo.
Industrial equipment and supplies

Miniature Electronic Component Corp., Plymouth St., Holbrook, Mass.
Precision potentiometers; wire-wound resistors

MSA's complete line of instruments solves variety of gas analysis problems

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5-45 49th Avenue,
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Telephone: Stillwater 4-1851
PHILADELPHIA 3, PENNA.
1614 Summer Street
Telephone: Locust 4-1216
PITTSBURGH 8, PENNA.
201 North Braddock Avenue
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Miniature Precision Bearings, Inc., Precision Park, Keene, N. H.
Ball, thrust; pivot, and special miniature bearings
(See advertisement of page 28)

Minitec, 5423 Delaware Ave., Los Angeles 41, Calif.
Thermal switches

Minneapolis Elect. & Construction Co., 80 South 12th St., Minneapolis 4, Minn.
Wire length measuring machines

Minneapolis-Honeywell Regulator Co., Aeronautical Div., 2600 Ridgway Rd., Minneapolis 13, Minn.
Gyroscopes; accelerometers; automatic control systems and components for aircraft and missile flight control

Minneapolis-Honeywell Reg. Co., Indus. Div., Wayne & Windrim Aves., Philadelphia 44, Pa.
Thermocouple and optical pyrometers; resistance thermometers; pressure thermometers; pressure gages; flow meters; liquid level gages; hygrometers; CO_2 meters; control systems (electric, air-operated, and combined electric and air-operated); combustion safety controls; moisture content recorders and controllers; furnace atmosphere recorders

Minneapolis-Honeywell Reg. Co., Boston Div., 1400 Soldiers Field Rd., Boston 35, Mass.
Rate gyros; cageable free gyros; microsyns; servomotors; synchros; and other specialized electromechanical and electronic instruments for measurement and control

Minneapolis-Honeywell Reg. Co., Rubicon Instrs. Ridge Ave. at 35th St., Philadelphia 32, Pa.
Precision electrical instruments

Minneapolis-Honeywell Reg. Co., Valve Div., Ft. Washington, Penna.
Control valves

Minnesota Mining & Manufacturing Co., 900 Fauquier Ave., St. Paul 6, Minn.
Magnetic tape recorders, wide-band

Mira Scientific Instruments, 2656 N. Pasadena Ave., Los Angeles 31, Calif.
Gas analyzers; electrical and electronic instrumentation; components

Mitchell Camera Corp., 666 W. Harvard St., Glendale 4, Calif.
Scientific motion picture cameras; components

Mitchell Industries, Inc., P. O. Box 17, Mineral Wells, Texas

Mitchell Radiation Prods. Corp., P. O. Box 70, Norristown, Pa.
X-ray apparatus

Mixing Equipment Co., Inc., 135 Mt. Read Blvd., Rochester 11, N. Y.
Laboratory apparatus

Model Engineering & Mfg., Inc., 50 Frederick St., Huntington, Ind.
Resistors; microwave instrumentation; medical equipments; contract machining

California Representative
Luscombe Engineering Co.
1129 S. Fair Oaks, Pasadena, Calif. RY-1-3386
120 North "B" St., San Mateo, Calif. DI-2-7057

Model Rectifier Corp., 1065 Utica, Brooklyn 25, N. Y.
Transistors; d-c power supplies; components

Modern Electrical Laboratory, 6131 S. Wentworth Ave., Chicago 21, Ill.
Laboratory apparatus

Modern Laboratory Equipment, Co. Inc., 1809-11 First Ave., New York 28, N. Y.
Constant-temperature equipment; oven; water baths; walk-in rooms; humidity refrigerated cabinets; environmental testing cabinets

Modern Metalcraft, 5001 Eastman Rd., Midland, Mich.
Metering and proportioning pumps; dual syringe feeders

Modernair Corp., 400 Preda St., San Leandro, Calif.
Cylinders and valves for air, water or oil hydraulic service; special fluid power components and packaged devices for automation

Modev Co., 1825 Ravenwood Ave., Dayton, Ohio

Moeller Instrument Co., 132nd St., & 89th Ave., Richmond Hill 18, N. Y.
Thermometers; hydrometers; hygrometers; psychrometers; mercury column vacuum gages
(See advertisement on page 195)

Mohawk Electronic Research Labs., R. D. 4, Amsterdam, N. Y.
Electrical and electronic instrumentation

Moisture Register Co., P. O. Box 910, Alhambra Calif.
Moisture testing instruments and devices

Molded Insulation Co., 335 E. Price St., Philadelphia 44, Pa.
Radiosondes; electronic equipment; components, assemblies

Molex Products Co., 9515 Southview Ave., Brookfield, Ill.
Relays; solenoids; switches; connectors

Moline Furniture Works, Moline, Ill.
Laboratory furniture

Monarch Manufacturing Co., 2014 N. Major Ave., Chicago 39, Ill.
Radio set testers

Monitor Controller Div., Industrial Electronics Co., Inc., 99 Grove St., Rockland, Mass.
Automatic electric motor controls

Monroe Calculating Machine Co., Inc., Electronics Div., E. Hanover Ave., Morris Plains, N. J.
Digital computers; plug-in circuitry

Monsanto Chemical Co., 1700 S. Second St., St. Louis 4, Mo.

Monsell, J. R., Pitman, N. J.
Dynamometers

Montgomery Mfg. Co., 202-204 Main St., Owensville, Ind.
Program clocks; process timers; el-clockworks

Moog Valve Co., Inc., Proner Airport, E. Aurora, N. Y.
Electrohydraulic servo components and control systems

Moore & Co., Samuel, Dekoron Products Div., Mantua, Ohio
Plastic-coated metal tubing; multiple-tube harnesses; junction boxes; grommets
(See advertisement on Inside Back Cover)

Moore Company, H. R., 200 W. Montgomery Ave., Hatboro, Pa.
Paint and film testing instruments; viscometers

Moore Corporation, John B., Peerless Bldg., P. O. Box 3, Nutley 10, N. J.
Instrument cleaning compounds and associated equipment

Moore Products Co., 901 E. Lycoming St., Philadelphia 24, Pa.
Indicating, recording and controlling instruments for flow, temperature, level, density, differential pressure; pneumatic comparator gages

Moraine Products Div., General Motors Corp., 1420 Wisconsin Blvd., Dayton 1, Ohio
Sintered metal powder filters; flame arrestors; bearings and structural parts; bi-metal bushings and washers

Moran Instrument Corp., 170 E. Orange Grove Ave., Pasadena 3, Calif.
Airborne and car mounted scintillation counters; portable electronic surveying systems

Morehouse Machine Co., 233 W. Market St., York, Pa.
Force measuring calibration equipment
(See advertisement on page 223)

Morganite, Inc., 3302-3320 48th Ave., Long Island City 1, N. Y.
Pyrometer tubes

Morrill & Morrill, 30 Church St., New York 7, N. Y.

Morris Co., J. I., 384 Elm St., Southbridge, Mass.
Miniature screws, nuts, washers; precision drills; taps; dies
(See advertisement on page 258)

Moseley Co., F. L. 409 N. Fair Oaks Ave., Pasadena 3, Calif.
Two-axis ("X-Y") recorders; control drives
(See advertisement on page 161)

Moser Jewel Co., P. O. Box 150, Perth Amboy, N. J.
Jewel bearings for electrical, aircraft, mechanical and marine instruments; steel and osmium tipped pivots
(See advertisement on page 111)

Mossman, Inc., Donald P., P. O. Box 265, Brewster, N. Y.
Lever, push button and turn switches

Motordyne Inc., 2661 S. Myrtle Ave., Monrovia, Calif.
Fractional-hp, ac and dc motors; power supplies

Motson Co., J. Frank, 1717 Bethlehem Pike, Flourtown, Pa.
Printing on plastics, glass, metals, ceramics, etc., printed circuits

Mt. Sopris Instrument, 1320 Pearl St., Boulder, Colo.
Geophysical and nucleonic instruments

Mountain Systems Inc., 864 Franklin Ave., Thornwood, N. Y.
Digital computers; data handling systems; and processing equipment

Mucon Corporation, 9 St., Francis St., Newark 5, N. J.
Subminature ceramic capacitors

Mueller Co., P.O. Box 671, Decatur, Ill.
High pressure pipe fittings; regulators; strainers; relief valves; non-lubricated plug valves

Mueller Electric Co., 1552EE E. 31st St., Cleveland 14, Ohio
Electrical test clips; alligator clips; insulators; connectors; plugs; jacks; ground clips

Mueller Laboratory, 1052 N. Allen Ave., Pasadena Calif.
Dimensional gages, magnetic counters, laboratory supply house

Muirhead Instrument Co., 677 Fifth Ave., New York 22, N. Y.
Precision electrical and electronic instruments, synchros; synchro test apparatus; magslips; ship stabilizer gyro control gear; facsimile telegraph apparatus

Mullen Tester Div., see Perkins and Son, Inc., B. F.

Mullenbach Div., Electric Machinery Manufacturing Co., 2100 E. 27th St., Los Angeles 58, Calif.
Electro-strictive relays and actuators; packaged instrumentation panels and controls; power resistors packaged motor control systems

Multi Amp Corp., 465 Lehigh Ave., Box 217, Union, N. J.
Portable and bench-type high current test equipment

Municipal Instrument Co., 3246 S. Cuyler Ave., Berwyn, Ill.
Magnetic dipping needles, pipe phone for checking leaks

Munsell Color Co., Inc., 10 E. Franklin St., Baltimore 2, Md.
Color comparators, color standards

Munston Mfg. & Service, Inc., Beech St., Islip, L. I., N. Y.
Power supplies, transformers; coils

Murphy & Miller, Inc., 600 W. Taylor St., Chicago 7, Ill.
Environmental test equipment to simulate low temperature, high temperature, humidity, altitude; air dryers, temperature baths
(See advertisement on page 86)

Murray Way Corp., Box 180, Birmingham, Mich.
Automatic equipment for buffing, polishing, grinding, filtering, coating

Mutual Industries, 1027 N. Seward St., Los Angeles, Calif.

Mutual Electronic Indust. Corp., 85 Beechwood Ave., New Rochelle, N. Y.

Mycalex Corp. of America, Clifton Blvd., Clifton, N. J.
Tube sockets; insulating materials

Myer Corp., Acra-Ment Gage Div., 633 Park Ave., Cranston, R. I.
Dimensional gages and fixtures

N

NJE Corp., 345 Carnegie Ave., Kenilworth, N. J.
Power supplies, including transistor; pulse generators, battery eliminators

NRC Equipment Corp., 160 Charlemont St., Newton Highlands 61, Mass.
High-vacuum components; equipment systems; gages; valves; mechanical diffusion pumps; seals; furnaces; impregnators driers; leak detectors

NRD Instrument Co., 6425 Etzel Ave., St. Louis 14, Mo.
Radiation detecting and counting instruments

NYT Electronics, Inc., 2979 N. Ontario St., Burbank, Calif.

Nader Manufacturing Co., 2681 S. Myrtle Ave., Monrovia, Calif.
Transistorized dc transformers; centrifugal governors for fractional-hp motors, miniature motor overload switches

Nalley Co., Leonard L., 9203 E. Rosecrans Blvd., Bellflower, Calif.
Electric analog computers; complex-wave generators; fire-control instruments; amplifiers, power supplies

Nankervis Co., G. L., Cox Instruments Div., 15310 Fullerton Ave., Detroit 27, Mich.
Test equipment; flowmeters; viscometers, and special testing devices for aircraft, automotive and chemical industries

Narda Microwave Corp., 118 Herricks Rd., Mineola, L. I., N. Y.
Microwave and high-frequency equipment; thermistors

Narda Ultrasonics Corp., 122 Herricks Rd., Mineola, L. I., N. Y.
Control systems; medical equipments; power supplies

(See advertisement on page 58)

Nash Engineering Co., 370 Wilson Road, South Norwalk, Conn.
Instrument air compressors

(See advertisement on page 37)

Nashville Surgical Supply Co., 401 Church St., Nashville 3, Tenn.

National Aircraft Corp., 3411 Tulare Ave., Burbank Calif.
Electronic systems, components, semi conductor devices, aircraft accessories; aircraft modification

National Appliance Co., 7634 S. W. Capitol Hwy., Portland 19, Ore.
Constant temperature baths, gravity and mechanical convection ovens; laboratory apparatus

National Automatic Products Co., Washington Ave., Berlin, Conn.
Precision aircraft engine parts

National Brass Co., 1600 Madison St., S. E., Grand Rapids 2, Mich.
Combustion and draft controllers
National Carbon Co., A Division of Union Carbide Corp., 30 E. 42 St., New York 17, N. Y.
Dry batteries

National Cash Register Co., Main & K Sts., Dayton 9, Ohio
Computers; business machine supplies

National Co., Inc., 61 Sherman St., Malden, 48 Mass.
Communications electronic systems; equipment components

National Controls, Inc., 400 Homer St., Newton Center, Mass.
Valves; humidity controllers; thermostats

National Cylinder Gas Co., 840 N. Michigan Ave., Chicago 11, Ill.

National Decalcomania Corp., 236 N. 60 St., Philadelphia 39, Pa.

National Electric Controller Co., 7070 Glenwood Ave., Chicago 26, Ill.
Rheostats

National Electric Instrument Div., Engelhard Industries, Inc., 92-21 Corona Ave., Elmhurst 73, N. Y.
Bore inspection equipment, telescopes

National Electronics Inc., 628 North St., Geneva, Ill.

National Engineering Products Inc., Washington Bldg., Washington 5, D. C.
Pressure gage equalizers

National Instrument Co., 246 Walnut St., Newtonville 60, Mass.
Electromechanical instruments and devices

National Instrument Co., 2701 Rockwood, Baltimore 15, Md.
Automatic pipettes

National Instrument Labs., Inc., 828 Evarts St., N.E., Washington, D. C.
Pneumatic, electronic, and biomedical equipment

(See advertisement on pages 94, 99)

National Pneumatic Co., Inc., Industrial Div., 125 Amory St., Boston 19, Mass.
Fractional hp, miniature and servo motors

National Pneumatic Co., Inc., Holtzer-Cabot Div., 125 Amory St., Boston 19, Mass.
Motors, synchronous, induction and servo, a-c and d-c with and without gear reduction

National Radiac, Inc., 475 Washington St., Newark 2, N. J.
Scintillation crystals; scintillation counter heads; nuclear electronic instrumentation

(See advertisement on page 105)

National Research Corp., 70 Memorial Drive, Cambridge 42, Mass.
Optical products, high vacuum apparatus

National Scientific Co., 2201 W. North Ave., Chicago 47, Ill.
Laboratory supply house

National Spectrographic Labs., Inc., 6300 Euclid Ave., Cleveland 3, Ohio
Spectrographs; spectroscopes, microdensitometers; testing devices

National Tel-Tronics Corp., 52 St. Casimir Ave., Yonkers, N. Y.
Dial lights, connectors, plugs, clips, etc.

National Time & Signal Corp., 21800 Wyoming Ave., Detroit 37, Mich.
Timers for welding and industrial process control

National Vulcanized Fibre Co., P.O. Box 311, Wilmington 99, Delaware
Dielectric materials; precision gears, fibre tubing

Natural Gas Equipment, Inc., 804 S. Fair Oaks Ave., P. O. Box 2297-D, Pasadena 2, Calif.
Automatic-control systems, pneumatically actuated valves, control panels

Navigation Computer Corp., 1621 Snyder Ave., Philadelphia 45, Pa.
Transistorized digital data processing and test equipment

Philadelphia Area Representative
The I. E. Robinson Company
7404 West Chester Pike, Upper Darby, Pa.
SHerwood 8-1294, FLanders 2-7017

Navbor Laboratories, Inc., E. V., 26 Manorhaven Blvd., Port Washington, N. Y.
Time delay relays; subminiature and hermetically sealed relays

Naz-Dar Co., 465 N. Milwaukee, Chicago 22, Ill.
Silk screen equipment

Neff Instrument Corp., 2211 E. Foothill Blvd., Pasadena, Calif.

Negus, T. S. & J. D., 69 Pearl St., New York 4, N. Y.
Nautical instruments

Neider Fused Quartz Co., 90 Broad St., Babson Park Boston 57, Mass.
Optical flats, quartz apparatus and components

Neise, Karl A., 404 Fourth Ave., New York 16, N. Y.
Dimensional gaging equipment

Nelson Electric Mfg. Co., 4041 S. Sheridan P. O. Box 5385, Tulsa 16, Okla.
High/low voltage switchgear; explosion-proof and weatherproof motor controls; custom-built instrument relays, switchboards

Rep—W. Pa., W. Va., Ohio Border Counties
William E. Wargo Company
211 Yarrow Lane, Pittsburgh 36, Pa.
TUxedo 4-5800, 4-5801

Nelson Instrument Co., 607 Howard St., Evanston, Ill.
Custom designers and consultants for control equipment, systems, and installations

Nelson, Ralph M., 911 Marshall Bldg., Cleveland 13, Ohio

(See advertisement on page 241)

Nelson & Street, 11705 Highview Ave., Kensington Md.
Chronographs; timers

Nems-Clarke, Inc., 919 Jesup Blair Dr., Silver Spring, Md.
Telemetering systems

Neptune Meter Co., 19 W. 50th St., New York 20, N. Y.
Liquid meters; gas meters

Neptune Pump Mfg. Co., 4912 N. 6 St., Philadelphia 20, Pa.
Metering and proportioning pumps; chemical feeders

Nester Company, Inc., L. G., Millville, N. J.
Laboratory apparatus; industrial glassware to customer's specifications

(See advertisement on page 103)

Neutronic Associates, 93-14 101st Ave., Ozone Prrk 17, N. Y.
Power supplies

Neutronics Res. Co., 165 Lake St., Waltham, Mass.
Ultraviolet microscopy; simple digital deadout; R&D countermeasures; D-amplifiers; proximaty fuses

New Brunswick Scientific Co., Somerset St., P. O. Box 606, New Brunswick, N. J.
Rotary and reciprocating shakers; laboratory equipment and instruments

New Departure Div., General Motors Corp., Bristol, Conn.
Ball bearings

New England Box Co., Greenfield, Mass.

SERVICE REPRESENTATIVES

California:	Carl A. Stone Associates, Inc. 8971 National Blvd. Los Angeles, California
Florida:	Col-Ins-Co 317 W. Forsyth Street Jacksonville, Florida
Illinois: (northern) Wisconsin (southern)	The Jelinek Company 906 Ellynwood Drive Glen Ellyn, Illinois
Michigan:	Basic Service Corp. 16544 Plymouth Rd. Detroit, Michigan
Missouri: Kansas (eastern) Illinois (southern)	Gordon Fixman Engineering 8160 Stanford Avenue St. Louis, Missouri
New England:	Richard F. MacDowell Co. 58 Orient Avenue Melrose, Massachusetts
New York: (metr.): New Jersey (northern)	Mechanical Specialties 30 Church Street New York 7, New York
New York: (U/State & W.)	Hardin D. Thweatt 768 Potomac Avenue Buffalo, New York
Pennsylvania: (eastern) New Jersey (southern)	K-S Engineering Co. P.O. Box 87 Media, Pennsylvania
Pennsylvania: (western) Ohio (eastern) West Virginia (northern)	Control Equipment Dist. P.O. Box 10921 Pittsburgh, Pennsylvania
Texas:	Acme Engineers 8219 Joplin Street Houston 17, Texas

NATIONAL INSTRUMENT LABORATORIES, INC.

New England Gear Works, South End Road, Southington, Conn.
Geared motors, motor-operated valves

New England Laminates Co., Inc., 481 Canal St., Box 43, Samford, Conn.
Metal-clad and unclad plastic laminates

New Hampshire Ball Bearings, Inc., 20 Grove St., Peterborough, N. H.
Miniature ball bearings

New Haven Clock Co., 133 Hamilton St., New Haven 4, Conn.
Capacitors; clock timers

New Hermes Engraving Machine Corp., 13-19 University Place, New York 3, N. Y.
Engraving machines

New Jersey Laboratory Supply Co., 235 Plane St., Newark, N. J.
Laboratory supplies

New Jersey Meter Co., Plainfield, N. J.
Compressed air meters; separators for removing water and oil from compressed air lines; liquid flow indicators with low flow signaling circuit

New London Instrument Co., Inc., 82 Union St., New London, Conn.
Electronic instruments; high frequency instruments; signal generators

New York Coil Co., P.O. Box 387, Phoenixville, Penna.
Coil windings except toroids; transformers; electromechanical assemblies; encapsulation; paper and plastic film capacitors

N. Y. Laboratory Supply Co., Inc., 76 Varick St. New York 13, N. Y.
Laboratory supplies

New York Rubber Corp., 100 Park Ave., New York 17, N. Y.

New York Scientific Supply Co., 28 West 30 West New York 1, N. Y.
Laboratory supplies

New York Transformer Co., Alpha, N. J.
Transformers

Newage Industries, Inc., 222 York Rd., Jenkintown, Pa.
Hardness testers; plastic tubing

Chicago Representative
Service Associated, Inc.
9236 S. Vincennes Ave., Chicago 20, Ill.
HIlltop 5-0555

Newall Mfg. Co., 139 N. Wabash Ave., Chicago 2, Ill.
Precision tools; jewel bearings

Newark Electric Co., 223 W. Madison St., Chicago 6, Ill.
Electrical and electronic instruments and supplies
(See advertisement on page 84)

Newark Scale Works, 10-12 Hobson St., Newark 8, N. J.
Scales

Newmatic Corp., West Hartford, Conn.
Pressure and flow measurement and control instrumentation; timers; switches; laboratory presses

Newman Co., M. M., 79 Clifton Ave., Marblehead, Mass.
Spirally-cut plastic tubing for binding wires into cables; miniature soldering irons

Newton Co., 55 Elm St., Manchester, Conn.
Control and data processing systems and components

Ney Co., J. M., P. O. Box 990, Hartford 1, Conn.

Niagara Blower Co., 405 Lexington Ave., New York, N. Y.
Air engineering equipment

Niagara Electrical Instrument Co., 45 Allen St., Buffalo, N. Y.
Electrical power analyzer

Nichols, Lyman, Cherryhurst, Fort Collins, Colorado
Engraving and etching of metal and glass

Nichols-Morris Corp., 76 Mamaroneck Ave., White Plains, N. Y.

Nicholson & Co., W. H., 169 Oregon St., Wilkes Barre, Pa.
Valves and traps

Nikon, Inc., 251 Fourth Ave., New York, N. Y.

Nilsen Mfg. Co., Church & Moreland, Addison, Ill.
Continuous phase shifting capacitors

Nilsson Gage Products, Inc., Div. of Boice Gages, P. O. Box 505, Poughkeepsie, N. Y.
Dimensional gages

Non-Linear Systems, Del Mar Airport, Del Mar, Calif.
Electronic and electrical instruments; digital voltmeters

Representative—Wash., Ore., Idaho, Mont.
Burt C. Porter Company
1209 Poplar Place, Seattle, Wash.
EAst 3-8330

Norcross Corporation, 247 Newtonville Ave., Newton 58, Mass.
Electric and electric-pneumatic viscometers
(See advertisement on page 219)

Norden-Ketay Corp., see Ketay Dept., Norden

Norgren Co., C. A., 3400 S. Elati St., Englewood, Colo.
Lubrication equipment

Norma-Hoffman Bearings Corp., Hamilton Ave., Stamford, Conn.

North American Philips, see Philips Electronics, Inc.

North Atlantic Industries, Inc., 603 Main St., Westbury, N. Y.
Electrical test instruments; circuit modules; temperature measuring systems

North Electric Co., 553 S. Market St., Galion, Ohio
Telephone switchboards and equipment; automatic control and electromagnetic components

North Hills Electric Co., Inc., 402 Sagamore Ave., Mineola, L. I., N. Y.
Coils; coil forms; current regulating equipment; transformers; toroids; electronic loads; voltage stds.
(See advertisement on page 143)

North Shore Nameplate, Inc., 214-27 Northern Blvd., Bayside 61, N. Y.
Anodized and etched aluminum foil nameplates
(See advertisement on page 127)

Northam Electronics, Inc., 2420 N. Lake Ave., Altadena, Calif.
Pressure, position, acceleration transducers; miniature magnetic tape recorders; data reduction systems

Northeast Electronics Corp., Municipal Airport Bldg., Concord, N. H.
Telemetering systems; monitors; VSWR indicators

Northeast Scientific Corp., 617 Concord Ave., Cambridge 38, Mass.
Microwave instrumentation; high voltage supplies; counters; printers; control systems
(See advertisement on page 142)

Northeastern Engineering, Inc., 25 South Bedford St., Manchester, N. H.
Electronic counters; spectrum analyzers; decade counters; electronic multimeters; frequency meters
(See advertisement on page 71)

Northrop Anaheim, Div. of Northrop Aircraft, Inc., 500 E. Orangethorpe Ave., Anaheim, Calif.
Weapons systems support equipment, armament and fire control devices

Norton Electrical Instrument Co., 83 Hilliard St., Manchester, Conn.
Electrical instruments; shunts

Norwood Controls, Detroit Controls Div., 934 Washington St., Norwood, Mass.
Electric instruments for measurement and control of process variables; dynamic pressure gages; special digital telemetering systems
(See advertisement on page 3)

Nuclear-Chicago Corp., 223 W. Erie St., Chicago 10, Ill.
Radioactivity measuring and detecting instruments

Nuclear Corp. of America, 2 Richwood Pl., Denville, N. J.
Magnetic flowmeters; nuclear industrial gages

Nuclear Development Corp. of America, 5 New St., White Plains, N. Y.
Nuclear reactor design, and electronic instrumentation and computer development

Nuclear Development Laboratory, P. O. Box 7034, Kansas City, Mo.
Radium detectors

Nuclear Electronics Corp., 2925 Broad St., Philadelphia 32, Pa.
Designers, manufacturers of nuclear, radiac instruments, lab test equipment

Nuclear Measurements Corp., 2460 N. Arlington Ave., Indianapolis 18, Ind.
Counting systems; scaling units; air and water monitors; portable instruments
(See advertisement on page 158)

Nuclear Research Corp., Southampton, Pa.
Radioactivity instrumentation; process measurement and control equipment

Nuclear Science & Engineering Corp., P. O. Box 10901, Pittsburgh 36, Pa.
Radioactivity instruments; level indicators

Nuclear Systems Div., Budd Co., 2950 Roberts Ave., Philadelphia 32, Pa.
Isotopes; isotope handling equipment

Representative—Pittsburgh, Cleveland, Buffalo
R. L. Holliday Co.
Box 10333, Pittsburgh 34, Pa.
LOcust 1-7620

Nucleonic Corp. of America, 196 Degraw St., Brooklyn 31, N. Y.
Radiation detectors; medical measuring instruments; counters

Nurnberg Thermometer Co., Inc., 124 Livingston St., Brooklyn 2, N. Y.
Laboratory supply house

Nye, Inc., Wm. F., Box 927, New Bedford, Mass.
Instrument and watch oils

O

O.K. Electronics Corp., 7 Hunt Place, Nutley 10, N. J.
Vacuum fuses; relays

O. K. Machine & Tool Corp., 551 East 179th St., New York 57, N. Y.
(See advertisement on page 128)

OPW Corp., 2735 Colerain Ave., Cincinnati 25, Ohio

Oak Mfg. Co., 1250 Clybourn Ave., Chicago 10, Ill.
Radio and television parts

Offner Electronics, Inc., 5320 N. Kedzie Ave., Chicago 25, Ill.
Dynograph recorders, amplifiers, writers, recording systems

O'Hara Waltham Mfg. Co., 74 Rumford Ave., Waltham 54, Mass.

Ohaus Scale Corp., 1050 Commerce Ave., Union, N. J.
Analytical balances

Ohio Carbon Co., 12508 Berea Rd., Cleveland 11, Ohio
Carbon seals; bearings; motor and generator brushes; contacts; carbon and wirewound resistors

Ohio Electric Mfg. Co., 5400 Dunham Rd., Maple Heights, Ohio

Ohmart Corp., 2236 Bogen St., Cincinnati 14, Ohio
Radioactivity gages to measure and control density, specific gravity, percent solids, level of liquids, solids and slurries

Ohmite Mfg. Co., 3601 Howard St., Skokie, Ill.
Close control rheostats, fixed and adjustable power resistors; precision and non-inductive resistors; attenuators; tap switches and r-f chokes; power relays

Representative—Philadelphia, Baltimore, Washington, D. C., Pittsburgh
Samuel K. Macdonald, Inc.
1531 Spruce St., Phila. 2, KIngsley 5-1205

Oil-Dyne, Inc., 2115 W. Marquette St., Chicago 36, Ill.
Hydraulic power units for valve operators, etc.; valves, pressure switches, etc.

Pittsburgh Area Representative
Banks Engineering Co.
5407 Penn Ave., Pittsburgh 6, Pa.
MOntrose 1-5153 or 1-6746

Oil Metering and Processing Equipment Corp., 4843 Yale Street, Houston 18, Texas
Computers, analog, electronic, digital; flowmeters

Oil Well Water Locating Co., 2230 Lemon Ave., Long Beach 6, Calif.
Oil well and refinery electronic integration of water cut in oil; automatic tank control; bleeder control; oil field automation; electronic oil gaging control

Okonite Co., Passaic, N. J.
Air and hydraulic tubing, friction and rubber tapes; electric wires, cords and cables

Oliver Instrument Co., Adrian, Mich.

Olsen Testing Machine Co., Tinius, Easton Road, Willow Grove, Pa.
Testing machines

Chicago Representative
Labquip Corporation
1829 N. Harlem Ave., Chicago 35, Ill.
NAtional 2-5720

Oltronix Co., 235 Underwood Drive, Atlanta 5, Ga.
Standard or specialty electronic instruments and precision meters for labs, industry, and wind tunnels

Olympic Inst. Labs, Dept 91, Vashon, Washington
Wire and cordage meters and equipment; trawl cable meters.
(See advertisement on page 82)

Olympic Metal Products Co., Inc., P. O. Box 71, Phillipsburg, N. J.
Instrument housings

Omega Machine Co., 345 Harris St., Providence, R. I.
Chemical feeding equipment for dry or liquid materials; by volume or by weight

Omicron Co., P. O. Box 907, Glendale, Calif.
Beam and bow compasses; ellipsographs

O'Neil-Irwin Manufacturing Co., 554 8th Ave., Lake City, Minn.

Opad Electric Co., 69 Murray St., New York 7, N. Y.
Power supplies; electrical and electronic test instruments; process control systems; components
(See advertisement on page 141)

Oppiem Co., Inc., 83 Uhland St., E. Rutherford, N. J.
Optical instruments and components; electrical and mechanical testing and measuring instruments

Optical Coating Lab., Inc., 1035 Sebastopol Rd., Santa Rosa, Calif.
Low-reflecting surface glass; lenses; mirrors

Optical Development Corp., 949 Broadway, New York 10, N. Y.
Magnifiers; microscope accessories

Optical Gaging Products, Inc., 26 Forbes St., Rochester 11, N. Y.
Dimensional gaging and inspection equipment

Optics Div., Texas Insts., Inc., 104 W. Foothill Blvd., Monrovia, Calif.
Precision optical components; prisms, lenses; windows, mirrors; reticles; systems.

Optics Mfg. Corp., Amber & Willard Sts., Philadelphia 34, Pa.
Plastic lenses, optics; magnifier viewer; anti-static compounds for plastic forming

Optimized Devices, Inc., Box 38, Gedney Station, White Plains, N. Y.
Automatic test equipment; go/no-go comparators; multi-channel monitoring systems

Optionic Research, Inc., 1374 Massachusetts Ave., Cambridge 38, Mass.
Biological instruments

Opto-Metric Tools, Inc., 137 Varick St., New York 13, N. Y.
Optical dimensional gages; precision mechanical gages; hardness testing equipment
(See advertisement on page 122)

Optron Corp., 3526 State St., Santa Barbara, Calif.
Displacement followers

Optron Laboratory, 2726 Salem Ave., Dayton 6, Ohio
Optical flats; reflectors; prisms

Orban Co., Inc., Kurt, Machine Tool Div., 34 Exchange Place, Jersey City 2, N. J.
Machine tools; mechanical recording indicators; precision gear checking equipment

Orbitran Co., Route 2, Box 1070, Lakeside, Calif
Electronic test equipment, delay lines

Oregon Electronics, 2105 S.E. Sixth Ave., Portland 14, Oregon
Regulated power supplies

Ormandy & Stollery, Ltd., 3 Victoria Place, Brightlingsea, Essex, England
(See advertisement on page 196)

Orradio Industries, Inc., Shamrock Circle, Opelika Ala.
Magnetic tape

Ortho Filter Corp., 196 Albion Ave., Paterson 2 N. J.
Networks; coils; filters; transformers

Orton Ceramic Foundation, Edward, Jr., 1445 Summit St., Columbus 1, Ohio
Pyrometric cones

Oryx Company, 9015 Wilshire Blvd., Beverly Hills Calif.
Soldering irons and transformers

Osborne Electric Sales Co., 712 S. E. Hawthorne Blvd., Portland 14, Oregon
Electrical components

Osby & Barton Co., Division of Flightex Fabrics, Inc. 148 W. River St., Providence 4, R. I.
Electronic instruments; precision component parts; precision tools

Oster Mfg. Co., John, Avionic Div., 1 Main St., Racine, Wisc.
Actuators; servo motors; servo motor tach generators; a-c drive motors; servomechanism assemblies; d-c motors; motor gear trains; synchros

Owen Laboratories Inc., 55 Beacon Place, Pasadena 10, Calif.
Standard and custom strain gage power supplies; bridge balancing, calibrating, indicating equipment; transistor test sets
California Representative
Luscombe Engineering Co.
1129 S. Fair Oaks, Pasadena, Calif. RY-1-3386
120 North "B" St., San Mateo, Calif. DI-2-7057

Owens-Illinois Glass Co., Owens-Illinois Bldg., Toledo 4, Ohio
Scientific and industrial instruments; and glass components

P

PCA Electronics Inc., 16799 Schoenborn St., Sepulveda, Calif.
Transformers, pulse; delay lines; networks, pulse forming; circuits, potted, including embedded components
(See advertisement on page 206)

P & H Electronics, 424 Colombia St., Lafayette, Ind
Communication equipment and accessories

P & H Sales Corp., 5650 N. Western Ave., Chicago 45, Ill.
Blueprint, white print and reproduction machines

PIC Design Corp., Div. of Benrus Watch Co., Inc. 447 Atlantic Ave., East Rockway, L. I., N. Y.
Detroit Representative
Heuschen, Jensen and Company
2842 W. Grand Blvd., Detroit 2, Mich
TRinity 1-0308

P-K Valve Corp., 683 Third Ave., New York 17, N. Y.
Venturi-ball type valves

PM Industries Inc., 460 North Ave., New Rochelle N. Y.
AC and DC motors, generators, servomotors, servomotor generators, hysteresis and synchronous motors

PSP Engineering Co., see Induction Motors of Calif.

P-W Industries, Inc., Duncan & Melrose Sts., Philadelphia 24, Pa.
Cable and tubing supports
(See advertisement on page 209)

P-W REPRESENTATIVES

Chemical—Petroleum Div.

ATLANTA 13, Georgia
Abernathy-Thomas Eng. Co., 224 14th St. N. W.
BATON ROUGE, Louisiana
Gay Sales Co. Inc., P. O. Box 2904, Istrouma Sta.
BIRMINGHAM, Alabama
Jos. W. Eshelman & Co. Inc., 1812 28th Ave. S.
BOSTON, Mass.
Owen C. Jones Co. P. O. Box 151, Wellesley Hills 82, Mass.
CHICAGO, Ill.
J. R. Simpson & Co. 1210 S. 17th, Maywood Ill
CHARLOTTE, N. C.
Abernathy-Thomas Eng. Co., 430 Sedgefield Rd
CINCINNATI 37, Ohio
Lester Johnson Co., 1717 Section Road
CLEVELAND 15, Ohio
Lester Johnson Co. 3909 E. 123rd St
DALLAS, Texas
Gay Sales Co. Inc., P. O. B. 8414
DENVER 11, Colorado
Process Equip. Co. Inc., 2548 W. 29th Ave
HOUSTON, Texas
Gay Sales Co. Inc., 420 Sul Ross St
KANSAS CITY 12, Missouri
Power Specialties, 1214 West 47th St
KINGSPORT, Tenn.
Abernathy-Thomas Eng. Co., 341 W. Market St
LOS ANGELES 5, California
Earl S. Condon Co. 3460 Wilshire Blvd
NEW YORK 17, New York
The Dana Beach Co., 101 Park Ave
OMAHA 2, Nebraska
Conrad R. Baugh, 524 W. O. W. Bldg., 14th & Farnam Sts
PHILADELPHIA 18, Pa.
Penn-Del Instrument Sales Co., 400 Bethlehem Pike
PITTSBURGH 16, Pa.
Biltmore Products Co. Inc., 1501 Potomac Ave
ROCHESTER, N. Y.
Carl A. Pearson Co., 316 Juniper St
ST. LOUIS 17, Mo.
Fred Zopff Co., 8030 Manchester
SALT LAKE CITY, Utah
Process Equip. Co. 29 E. 2nd South
SAN FRANCISCO 5, Calif.
Oliver B. Lyman Co., 55 New Montgomery St
SCHENECTADY, New York
Carl A. Pearson Co., 939 Cutler St
SEATTLE, Wash.
Automation Products, 2800 15th Ave. West
SPOKANE 2, Wash.
Automation Products, North 120 Div. St
TAMPA 3, Fla.
Minich-DuVon Corp., 2500 W. Hillsboro Ave
TULSA, Okla.
The Ben McKalip Co., 4176 E. Admiral Pl.

Pace Electrical Instruments Co., Inc., 70-31 84th St. Glendale 27, L. I., N. Y.
Electrical indicating instruments

Pace Engineering Co., 6914 Beck Ave., North Hollywood, Calif.
Thermocouple reference junctions circuit calibrators transducers and related electronic equipment for pressure, strain, physical measurements

Pacific Automation Prods., Inc., 1000 Airway, Glendale 1, Calif.
Multi-conductor neoprene jacketed electronic cable and cable assemblies

Pacific Industrial Electronics, 252 Fifth St., San Francisco 3, Calif.
Printed circuits; special power supplies; medical instrumentation; diode test sets; microphonic manometers

Pacific Instrument Co., 4926 E. 12th St., Oakland Calif.
Custom manufacture of transformers, reactors, magnetic amplifiers, bridges

Pacific Laboratories, 12808 Venice Blvd., Los Angeles 66, Calif.
Data recording cameras; interval timers

Pacific Optical Corp., 120 N. Glasgow St., Inglewood 1, Calif.
Optical instruments for industrial, scientific, educational and military use; optical fabrication in glass and plastic lenses

Pacific Scientific Co., 6280 Chalet Dr., Bell Gardens, Calif.
Electromechanical instruments; rate gyros; precision linear potentiometers; accelerometers

Pacific Semiconductors, Inc., 10451 W. Jefferson Blvd., Culver City, Calif.
Computer diodes subminiature, hermetically sealed glass and metal envelope; test equipment

Pacific Solenoids, Inc., 500 E. Franklin St., El Segundo, Calif.
Torque solenoids and related devices

Pacific Technical Co., 2047 Sawtelle Blvd., Los Angeles 25, Calif.

Pacific Transducer Corp., 11838 W. Pico Blvd., Los Angeles 64, Calif.
Microscopes and accessories, electrical instruments and components; ultra-violet lamps; surface temperature recording, stem, glass and mercury thermometers; hardness testers

Pacific Universal Products Co., 168 Vista Ave., Pasadena 8, Calif.
Vacuum coatings; lenses; prisms; military optics; first surface; transparent mirrors; metalized attenuator plates; waveguide resistance elements; filters; glass components

Packard Bell Electronics Corp., Technical Products Div., 12333 W. Olympic Blvd., Los Angeles 64, Calif.
Process control systems; converters; power supplies

Packard Instrument Co., Box 428, La Grange, Ill

Packless Metal Hose, Inc., 780 S. Columbus Ave., Mt. Vernon, N. Y.

Palm Bros. Decalcomania Co., 3684 Regent Ave., Cincinnati 12, Ohio
Decalcomanias

Palmer Thermometers, Inc., 2501 Norwood Ave., Cincinnati 12, Ohio
Industrial indicating thermometers; mercury actuated dial and recording thermometers; laboratory and ASTM precision types
(See advertisement on page 198)

Palnut Company, Glen Road, Mountainside, N. J.
Locknuts, fasteners, and associated tools; hardware

Palo Laboratory Supplies, Inc., 81 Reade St., New York 7, N. Y.
Paper testing machines; laboratory supplies

Palo-Myers Inc., See Palo Lab. Supplies, Inc.

Palos Optical Co., Box 6, Palos Heights, Ill.
Optical instruments; contract machining, precision

Pan American Trade Dev. Corp., 2 Park Ave., New York 16, N. Y.

Panalarm Products, Inc., 6312 N. Broadway, Chicago 40, Ill.
Annunciator and alarm systems; liquid level indicators and recorders; relays

Panascan, Inc., 6312 N. Broadway, Chicago 40, Ill.
Process scanning and monitoring systems

Panero Mirrors Inc., 2958 Los Feliz Blvd., Los Angeles 39, Calif.
Mirrors; high vacuum coatings
(See advertisement on page 124)

Panduit Corp., 14461 Waverly Ave., Midlothian, Ill
Duct, plastic, electrical wiring; lacing material; plastic spirally-cut tubing

Panellit, Inc., 7401 N. Hamlin Ave., Skokie, Ill.
Annunciators; control panels; coordinated control systems; scanning and monitoring devices.

Panoramic Radio Products, Inc., 10 S. Second Ave., Mt. Vernon, N. Y.
Electronic instruments and inspection devices

Paper Manufacturers Co., Inc., 9800 Bustleton Ave., Phila. 15, Pa.

Par-Metal Products Corp., 32-62 49th St., Long Island City 3, N. Y.
Relay racks; cabinets; sliding shelves; panels; chassis; rack accessories

Para Laboratory Supply Co., 221 N. Hermitage Ave., Trenton 8, N. J.
Laboratory supply house

Parabam, Inc., 110 Lomita St., El Segundo, Calif.
Research, development, manufacturing digital systems, components, data reduction equipment, test equipment, test equipment, camera shelters
(See advertisement on page 59)

Paragon Electric Co., 1600 12th St., Two Rivers, Wis.
Time controls, industrial and commercial

Parameters, Inc., 195 Herricks Rd., New Hyde Park, N. Y.
Special test equipment for hydraulics and electronics

Parametrics, 1926 Placentia St., Costa Mesa, Calif.
Temperature test chambers; flexible couplings; pressure pickups; servomechanisms

Paramount Paper Tube Corp., 614 S. Lafayette St., Fort Wayne 2, Ind.
Spiral wound paper tubing

Parisian Novelty Co., 3510 S. Western Ave., Chicago 9, Ill.

Park Nameplate Co., Inc., 34-10 Linden Pl., Flushing 54, L. I., N. Y.
Anodized, pressure sensitive aluminum nameplates; instruction plates; decorative trim

Parker Hannifin Corp., Parker Fittings & Hose Div., 17325 Euclid Ave., Cleveland 12, Ohio
Tube & hose fittings; synthetic rubber O-rings; custom-molded parts; unicellular floats
Distributor
Williams and Co., Inc., The House of Metals
Cleveland, Cincinnati, Columbus, Toledo, Ohio; Louisville, Ky.; Pittsburgh, Pa.

Parker-Hartford Corp., 650 Franklin Ave., Hartford, Conn.
2-dimensional, 3-dimensional cams for jet-aircraft instrument-and fuel control systems; engraving; marking tools; dies

Parker Seal Co., Div. Parker Hannifin Corp., 10567 West Jefferson Blvd., Culver City, Calif.
Static sealing devices for flanges, waveguides, connectors, fittings and fasteners

Parr Instrument Co., 211-53 St., Moline, Ill.
Combustion bombs; calorimeters; hydrogenation apparatus; melting point apparatus; high-pressure equipment

Parr Manufacturing Corp., 44 Austin St., Newark 2, N. J.
Electrical ground detectors; fault locators

Parsons Co., Ralph M., Electronics Div., 151 DeLacey Ave., Pasadena, California
Electronic instrumentation systems and components for aircraft, missile research, flight testing, telemetering, timing, and miss-distance indicator

Partlow Corp., 217 Campion Rd., New Hartford, N. Y.
Temperature indicators and controllers, thermometers process timers, humidity controls

Cleveland Representative
Glatte & Company
2012 W. 25th St., Cleveland 13, Ohio
TOwer 1-0897

Pasadena Hydraulics, Inc., 1433 Lidcombe St., El Monte, Calif.
Hydraulic presses with individually controlled heated platens up to 600°F., bench and floor models from 20 to 125 tons
(See advertisement on page 117)

Passaic Analytical Laboratories, Inc., Passaic Ave., Caldwell, N. J.
Instrument cleaning machines

Patent Button Co., Patwin Instruments Div., Waterbury 20, Conn.
Flame photometers and electro-polarizers for research, control and clinical use

Philadelphia Area Representative
William R. Scholes
P. O. Box 104, Cheltenham, Penna.
PIlgrim 5-2765

Path Engineering & Machine Products, 1048 Pico Blvd., Santa Monica, Calif.
Dividers and rotary tables
(See advertisement on page 115)

Patterson Co., Wayne D., 807 Yale St., Los Angeles 12, Calif.

Patterson Screen Div., E. I. duPont de Nemours & Co., Towanda, Pa.
X-ray intensifying and fluoroscopic screens

Patton-MacGuyer Co., 17 Virginia Ave., Providence 5, R. I.

Patwin Instruments Div., see Patent Button Co.

Paul & Stein Bros., Inc., F. H., 235 Fifth Ave., New York 16, N. Y.
Electrical and electronic components

Paulstick & Sons, H., 2124 Fulton St., Brooklyn 33, N. Y.
Thermometers

Pax Electronics Co., 66-28 Myrtle Ave., Glendale 27, L. I., N. Y.
Coils; connectors; transformers; power supplies

Pearson Electronics, 707 Urban Lane, Palo Alto, Calif.
Very high power, high voltage pulse transformers.

Pederson Electronics, P. O. Box 572, Lafayette, Calif.
High-fidelity equipment: Am-fm tuners, 20 and 50 watt amplifiers and pre-amp-amplifier combinations

Peer, Inc., 1200-48 Milton St., Benton Harbor, Mich.

Peerless Equipment Co., 111 Ortega Ave., Mountain View, Calif.
Electrical and mechanical counting, timing and recording devices and actuating switches; control systems

Peerless Roll & Leaf Co., Inc., Precision Rolled Metal Div., 4511 New York Ave., Union City, N. J.

Pegasus Laboratories, 3690 Eleven Mile Rd., Berkley, Mich.
Electrohydraulic servomechanisms

California Representative
Luscombe Engineering Co.
1129 S. Fair Oaks, Pasadena, Calif. RY-1-3386
120 North "B" St., San Mateo, Calif. DI-2-7057

Penberthy Injector Co., Div. Buffalo-Eclipse Corp., 1242 Holden Ave., Detroit 2, Mich.
Pressure and level gages and automatic controllers; UV transmitting glass

Penberthy Instrument Co., 4301 Sixth St., Seattle 8, Washington
Industrial and smoke periscopes
(See advertisement on page 215)

Penfield Manufacturing Co., Inc., 19 High School Ave., Meriden, Conn.

Penn Instruments Div., Burgess-Manning Co., 4110 Haverford Ave., Philadelphia 4, Pa.
Flow meters, Venturi-tubes; electric and pneumatic transmission summation devices

Pittsburgh & Buffalo Representative
M. S. Jacobs & Associates, Inc.
810 Noblestown Rd., Pittsburgh 5, Pa. WA 1-6140
1807 Elmwood Ave., Buffalo 7, N. Y. DE 3229

Penn Optical & Instr. Co., 19542 Bristol St., Costa Mesa, Calif.
Precision optical parts; optical instruments; interferometers; spherometers; optical benches
(See advertisement on page 180)

Penn Panel & Box Co., Willows Ave., Collingdale, Penna.
Instrument, control, graphic, electrical and pneumatic panels

Penn Precision Products, Inc., 501 Crescent Ave., Reading, Penna.
Precision rolled beryllium copper, phospor bronze, nickel, silver, brass, chromium copper, and stainless steel strip

Penna. Flexible Metallic Tubing Co., 72nd St. & Powers Lane, Philadelphia 42, Pa.

Penna. Pump & Compressor Co., Easton, Pa.
Instrument-air compressors; dry vacuum pumps

Perfex Div., General Controls Co., Iron Mountain, Mich.
Automatic temperature controls for oil burners, stokers, gas burners, refrigeration and air conditioning

Performance Measurements Corp., 15301 W. McNichols Rd., Detroit 35, Mich.
Servo null balance digital indicators for flow, temperature, voltage, resistance, etc.

Perkin-Elmer Corp., Main Ave., Norwalk, Conn.
Precision analytical laboratory and process stream instruments; optical electro-optical systems, electronic components, infrared and gas chromatography instruments

Perkin Engineering Corp., 345 Kansas St., El Segundo, Calif.
Regulated dc power supplies; ac line voltage regulators

Perkins & Son, Inc., B. F., Mullen Tester Div., P. O. Box 388, Holyoke, Mass.
Testers for leather, paper and textiles

Permag Corp., 210 Taafee Place, Brooklyn 5, N. Y.
Permanent magnets
(See advertisement on page 117)

Permanent Magnet Co., Inc., Indianapolis 26, Ind.
Alnico, cobalt, and chrome permanent magnets

Permo Incorporated, see Fidelitone

Permutit Company 330 W. 42nd St., New York 36, N. Y.
Water conditioning equipment; ion exchange resins, industrial waste treatment equipment; gas analyzing and indicating equipment
(See advertisement on page 99)

Pittsburgh Area Representative
W. A. Stoeltzing, Inc.
940 Western Ave., Pittsburgh 33, Pa.
ALlegheny 1-9400

Peschel Electronics, Inc., R.F.D. #1, Patterson, N. Y.
High voltage test sets (ac, dc, ac/dc); corona test sets; insulation testers, including very high voltage range
(See advertisement on page 108)

Pesco Products Co., 24700 North Miles Rd., Bedford, Ohio
Fractional-hp and geared motors; pumps

Peterson & Co., Inc., Leonard, 1222 Fullerton St., Chicago 14, Ill.
Laboratory furniture

Petrometer Corp., 43-22 10th St., Long Island City 1, N. Y.
Liquid depth indicators and controls; remote-reading specific gravity indicators; manifolding valves for pneumatic systems
(See advertisement on page 32)

Pfaltz & Bauer, Inc., 350 5th Ave., New York 1, N. Y.
Laboratory control instruments

Phalo Plastics Corp., 25 Foster St., Worcester 8, Mass.
Thermoplastic-insulated wire and cable; power supply cords; cord sets; plastic tubing wiring harnesses

Phaostron Instrument and Electronic Company, 151 Pasadena Ave., S. Pasadena, Calif.
Electric panel meters; laboratory instruments; test instruments; relays; deposited carbon resistors

Philadelphia Gear Works, Inc., G. St. and Erie Ave., Philadelphia 34, Pa.
Speed reducers; gears; flexible couplings; automatic valve operators

Philadelphia Pump, Div. of American Meter Co., 13,500 Philmont Ave., Philadelphia, Pa.

Philadelphia Scientific Glass Co., 4 Eckard Ave., Abington, Pa.
Scientific and industrial instruments

Philadelphia Thermometer Co., 6th and Cayuga Sts., Philadelphia 40, Pa.
Instruments for temperature indication, control and regulation

Philamon Labs., 90 Hopper St., Westbury, L. I., N. Y.
Tuning fork resonators and frequency standards; frequency dividers, oscillators; power amplifiers

Philbrick Researches, Inc., George A., 285 Columbus Ave., Boston 16, Mass.
Computers; amplifiers, medical equipments

Philco Corp., Accessories Div., Tioga and C Sts., Philadelphia 34, Pa.
Electrical and electronic instrumentation, scomponents; batteries

Philco Corp., G & I Div., 4700 Wissahickon Ave., Philadelphia 44, Pa.
All transistor digital computers; ITV; control systems

Philips Electronics, Inc., Instruments Div., 750 S. Fulton Ave., Mount Vernon, N. Y.
X-ray diffraction, spectographic equipt.; industrial radiographic, fluoroscopic equipt.; liquid air installation

Phillips Manufacturing Co., 3475 W. Touhy Ave., Chicago 45, Ill.
Vapor degreasers; instrument cleaning machines

Phillips & Co., H. A., 3255 W. Carroll Ave., Chicago 24, Ill.
Float controls; thermostatic valve controls; liquid level indicators; liquid return systems; solenoid valves

Phillips & Hiss Co., 1145 N. McCadden Place, Hollywood 38, Calif.
Precision drilling machines, pressure pickups

Phillips Control Corp., 59 W. Washington, Joliet, Ill.
Relays and solenoids

Phillips-Drucker, P.O. Box 507, Astoria, Oregon
Table, floor and refrigerated model centrifuges for clinical or research laboratories

Phipps and Bird, Inc., 303 S. Sixth St., Richmond 5, Va.
Laboratory apparatus and chemicals

Phoenix Die Casting Co., 21 Illinois St., Buffalo 3, N. Y.

Phoenix Precision Instrument Co., 3803 N. 5th. St., Philadelphia 40, Pa.
Light scattering photometers (molecular weight, particle size); differential refractometer; forward scattering aerosol and smoke photometers; continuous recording differential refractometers; control systems

Photo Chemical Products, Inc., 479 Walton Ave., New York 51, N. Y.
Panel marking via photo methods

Philadelphia Area Representative
William R. Scholes
P. O. Box 104, Cheltenham, Penna.
PIlgrim 5-2765

Photo-Crystals, Inc., 15 S. First St., Geneva, Ill.
Cadmium sulphide, photocells; humidity sensing elements

Photo Research Corp., 837 N. Cahuenga Blvd., Hollywood 38, Calif.
Optical instruments and components; brightness spot meters; color densitometers; exposure meter testers

Eastern United States Rep
Hoffman Engineering Corp.
183 R Sound Beach Ave.
Old Greenwich, Conn. NEptune 7-3557

Photobell Co., Inc., 43 Vesey St., New York 7, N. Y.
Photoelectric equipment

Photocircuits Corporation, New Street, Glen Cove, L. I., N. Y.
Printed circuits and components

Photocon Research Products, P. O. Box 5485, Pasadena, Calif.
Test equipment for measuring pressures in jet, rocket, and automotive engines; counters for guided missiles

Photogrammetry Inc., 7961 Eastern Ave. Silver Spring, Md.
Photographic and optical instruments and components

Photoplating Co., 215 N. E. 5th St., Minneapolis 13, Minn.
Aerial photo interpreting scales and rules

Photovolt Corp., 35 Madison Ave., New York 16, N. Y.
Photo-electric elements; photometers electronic timing devices; photo-electric colorimeters; photo-electric exposure meters; densitometers

Photron Instrument Co., 6516 Detroit Ave., Cleveland 2, Ohio
Oscillographs, amplifiers

Physical Research Labs., Inc., 1909 Park Ave., New York 35, N. Y.
Humidity and moisture content measurement and automatic control

Physics Research Laboratories, P. O. Box 555, Hempstead, N. Y.
Electrical and electronic instrumentation
(See advertisement on page 11)

Pickard & Burns, Inc., 240 Highland Ave., Needham Mass.
Amplifiers

Picker X-Ray Corp., 25 South Broadway, White Plains N. Y.
X-ray equipment

Pike & Co., E. W., 492 North Ave., Elizabeth 3, N. J.
Illuminated magnifiers and microscopes

Pimex, Inc., 18 E. 60th St., New York 32, N. Y.
Electric furnaces; reflecting galvanometers; standard resistances

Pioneer Electronics Corp., 2235 S. Carmelina St., W. Los Angeles 64, Calif.
Vacuum switches, picture tubes

Pioneer Magnetics, Inc., 5858 Wilshire Blvd., Los Angeles 36, Calif.
Frequency, voltage, current regulators; static switching elements

Pitometer Log Corp., 237 Lafayette St., New York 12, N. Y.
Pitot tube flowmeters

Pittsburgh Instrument & Machine Co., 1026 Reedsdale St., Pittsburgh 12, Pa.
Brinell machines; alternating impact machines; surveying instruments

Pittsburgh Lectrodryer Corp., Division of McGraw-Edison, P. O. Box 1766, Pittsburgh 30, Pa.
Instrument air dryers

Plamondon Magnetics Co., 1850 Hubbard St., Chicago 22, Ill.

Planet Mfg. Co., 225 Belleville Ave., Bloomfield, N. J.
Electrolytic capacitors

Plastic Capacitors, Inc., 2620 N. Clybourn, Chicago 14, Ill.
Paper and plastic dielectric capacitors; high-voltage dc power supplies; pulse forming networks; metal, glass and bakelite containers

Plastic Service Guild, 233 Condor St., East Boston 28, Mass.
Chemically resistant plastic coatings for metal

Plumb Co., Inc., D. S., 73-77 Norfolk St., Newark 3, N. J.
Pressure gage movements; water meter registers

Plummer & Kershaw, 2750 Frankford Ave., Philadelphia 34, Pa.
Optical parts

Pneumafil Corp., 2516 Wilkinson Blvd., Charlotte 8 N. C.
Vibration control equipment; mounting bases; isolators; shock mounts; electrical devices; line fault locators; voltage and current recorder accessories

Pneumatic Corp., 2516 Wilkinson Blvd., Charlotte, N. C.
Mounting bases; shockmounts; cabinets; chassis; panels

Pneumatic Scale Corp., Ltd., 72 Newport Ave., Quincy, Mass.
Automatic filling machines; scales

Pneumercator Co., Inc., 305 E. 46th St., New York, N. Y.
Liquid level indicators; mercury-column pressure indicators

Pneu-Trol Devices, Inc., 1436 N. Keating Ave., Chicago 51, Ill.
Automatic time-control systems; control valves

Polarad Electronics, Corp., 43-20 34th St., Long Island City 1, N. Y.
Spectrum analyzers; receivers; signal generators; sweep generators; automatic-recording titrators; electron-resonance spectrometers; rotating cylinder viscometers

Polarized Light-Photoelastic Co., 96 Tompkins Circle, Staten Island 1, N. Y.
Photoelastic polariscopes

Polarizing Instrument Co., Buckhout St., Irvington, N. Y.
Photoelasticity apparatus

Polaroid Corp., 730 Main St., Cambridge 39, Mass.

Pollak Corp., Joseph 81 Freeport St., Boston 22, Mass.
Relays; electromechanical components
(See advertisement on page 166)

Poly-Scientific Corp., Blackburg, Virginia
Miniature slipring assemblies; miniature commutators

Polymer Corp., 2120 Fairmount Ave., Reading, Pa.
Plastic stock shapes; conveyor tubing and hose; plastic molding and coating powders; coating equipment

Polyphase Instrument Co., E. Fourth St., Bridgeport, Penna.
Stress-strain recorders; electrical testing and measuring instruments; transistor testers; analyzers; components; pulse transformers; filters

Polytechnic Research & Developemnt Co., Inc., 202 Tillary St., Brooklyn 1, N. Y.
Microwave uhf-vhf test equipment and components, metal film resistors

Poole Instruments, Inc., 150 Express St., P.O. Box 1532, Dallas 21, Texas
Instruments for inspection of physical dimensions, fluid density, and physical volume by use of sound waves

Popper & Sons, Inc., 300 Fourth Ave., New York 10, N. Y.
Liquid filling equipment; marking and printing machinery; laboratory supplies

Porta-Trace, Inc., 50 Wall St., Binghamton, N. Y.
Fluorescent-illuminated tracing and viewing devices and "scopes"

Porter, Inc., George K., Bethlehem Pike, Hatfield, Penna.
Glass blowing, precision cylindrical and tapered tubing

Portman Instrument Co., Town Dock Road, New Rochelle, N. Y.
Optical comparators, projectors and gages; microscopes

Posen & Kline Tube Co., Whitehall Rd. & Township Line Rd., P. O. Box 549, Norristown, Penna.
Capillary and Bourdon tubing

Post Company, Frederick, P. O. Box 803, Chicago 90, Ill.
Instruments and equipment for architects and engineers

Post Machinery Co., Electronic Products Div., 145 Elliott St., Beverly, Mass.
High speed electronic counter; lineal footage counters

Potter Aeronautical Corp., Route No. 22, Union, N. J.
Aircraft power-plant instruments; industrial flowmeters, frequency meters, counters, signal converters

Potter Co., 1950 Sheridan Rd., North Chicago, Ill.
Capacitors, filters, power supplies

Potter & Brumfield Inc., Princeton, Ind.
Relays

Potter Instrument Co., Sunnyside Blvd., Plainview, L. I., N. Y.
Electronic counting, timing, control computing, recording and digital data handling equipment; high-speed printers, magnetic and paper tape handlers

Power Designs, Inc., 89-25-130th St., Richmond Hill 18, N. Y.
Automatic voltage and current regulators; amplifiers; power supplies
(See advertisement on page 33)

Power Sources, Inc., South Ave., Burlington, Mass.
Dc-to-dc static converter for missile telemetering, etc.; ac to dc power supplies; static frequency converters; dc to ac inverters

Power Supplies, Inc., RFD #1, Route 143, Highland, Ill.
Power supplies; amplifiers, and associated electronic instruments

Powers Regulator Co., 3400 Oakton St., Skokie, Ill.
Temperature, humidity, and pressure controllers and valves; indicators, and recorders; automatic control systems for heating and air conditioning

Powrex Switch Co., 36 Pleasant St., Watertown 72, Mass.
Mercury switches

Praktica Co., Inc., The, 705 Bronx River Rd., Bronxville 8, N. Y.
Cameras and accessories

Pratt & Whitney Co., Inc., Div. Niles-Bement Pond Co., West Hartford 1, Conn.
Machine shop instruments

Precise Development Corp., 2 Neil Court, Oceanside, L. I., N. Y.
Electrical and electronic instrumentation

Precise Measurements Co., Millbrook Rd., R.D. 1, Route 202, Flemington, N. J.
High-voltage power supplies; electrical circuit symbol stamps
(See advertisement on page 140)

Precise Products Co., 1328 Clark St., Racine, Wisc.
High speed milling machines; hardness testers

Precision Apparatus Co., Inc., 70-31 84th St., Glendale 27, L. I., N. Y.
Radio test instruments

Precision Castings Co., Inc., Drawer 1077, Syracuse 1, N. Y.

Precision Diamond Tool Co., Box 274, Elgin, Ill.
Diamond tools; grinding wheels

Precision Electronics, Inc., 9101 King St., Franklin Park, Ill.
High-fidelity pre-amplifiers; amplifiers and tuners; PA systems; electronic test instruments

Precision Gage & Tool Co., 320 East 3rd St., Dayton 2, Ohio
Machine shop gages

Precision Glass Products Co., 6138-40 Beechwood St., Philadelphia 38, Pa.
Precision-bore tubing; conductivity cells; glass working equipment

Precision Line, Inc., 63 Main St., Maynard, Mass.

Precision-Made Products, Inc., 7 Harris Ct., Worcester 4, Mass.
Wire, cable and accessories; metal and screw machine products and assemblies; electronic components

Precision Manufacturing Co., 48-15 108th St., Corona 68, N. Y.

Precision Mechanisms Corp., 577 Newbridge Ave., East Meadow, L. I., N. Y.
Servomechanisms; gears, clutches; kits

Precision Meter Co., Inc., 126 Greenpoint Ave., Brooklyn 22, N. Y.
Electrical measuring instruments

Precision Paper Tube Co., 2033 W. Charleston St., Chicago 47, Ill.

Precision Parts Co., Carter Radio Div., 213 Institute Place, Chicago 10, Ill.

Precision Products Co. Inc. of Waltham, 26 Bedford St., Waltham 54, Mass.
Hair springs and hair spring assemblies
(See advertisement on page 180)

Precision Products, Inc., 530 So. Quaker, Tulsa, Okla.
Mechanical timers; time switches; precision gears; automatic screw machine products; metal punchings

Precision Radiation Instruments, Inc., 4223 W. Jefferson Blvd., Los Angeles 16, Calif.
Geiger counters and scintillators; high fidelity tuners & amplifiers

Precision Recording Chart Co., A division of Technical Paper Co., Inc., 2430 Linden Ave., E., Linden, N. J.
Instrument charts in rolls, accordian folded, printed, punched, etc., on sensitized or unsensitized paper

Precision Resistance Co., Central Park Ave., Box 116, Yonkers, N. Y.
Fixed and variable resistors; negative-temperature-coefficient resistors

Precision Resistor Co., Inc., 109 U.S. Highway #22, Hillside 5, N. J.
Resistors

Precision Rubber Products Corp., 3110 Oakridge Dr., Dayton 7, Ohio
"O" rings; rubber washers

Precision Scientific Co., 3737 Cortland St., Chicago 47, Ill.
Standard and custom-built laboratory equipment, ovens

Precision Thermometer & Instrument Co., 1434 Brandywine St., Philadelphia 30, Pa.
Thermostats; thermoregulators; relays; barometers; hydrometer pressure gages

Pittsburgh & Buffalo Representative
M. S. Jacobs & Associates, Inc.
810 Noblestown Rd., Pittsburgh 5, Pa. WA-1-6140
1807 Elmwood Ave., Buffalo 7, N. Y. DE-3229

Precision Tube Company, Wissahickon Ave. & Church Rd., North Wales, Pa.
Fine tubing and metal shielded wire

Preco Co., 14234 Grandmont Rd., Detroit 27, Mich.
Hairsprings; precision gears; instrument staffs, pivots, pinions, etc.

Preferred Utilities Mfg. Corp., 1860 Broadway, New York, N. Y.
Boiler plant instruments

Preis Engraving Machine Co., H. P. 651 State Highway 22, Hillside, N. J.
Engraving, etching, marking and printing machines, tools and supplies

Preiser Co., Inc., B., P. O. Box 6118, Charleston 2, W. Va.
Laboratory equipment and supplies

Premier Metal Products Co., 337 Manida St., New York 59, N. Y.
Instrument chassis and cabinets
(See advertisement on page 51)

Premier Metal Works, Inc, 1616 S. Clinton St. Chicago 16, Ill.

Premier Research Laboratories, Inc., 81 Seventh Ave. New York 11, N. Y.
Quartz crystal units; frequency control crystals; ovens for electronic component stability; tourmaline crystals, crystals for transducers; crystal holders

Presin Co., 12128 W. Pico Blvd., Los Angeles 64, Calif.
Program controllers; counters; totalizers; tachometers

Pressure Products Industries, Inc., Hatboro, Pa.
Pressure instrumentation; pumps; autoclaves; valves, components

Presto Recording Corp., Paramus, N. J.
Magnetic tape recorder

Price Electric Corp., Church & 2nd Sts., Frederick, Md.
Relays, aircraft and electronic

Printed Electronics Corp., 7 North Ave., Natick, Mass.
Printed circuits; lab-production print.-c. machines

Pritchard & Co. of Calif., J. F., 4625 Roanoke Pkwy., Kansas City 12, Mo.
Instrument air dryers

Probescope Co., 8 Sagamore Hill Dr., Port Washington, N. Y.
Spectrum analyzers; phase analyzers; synchronous sweep generators; miniature and multiple channel oscilloscopes, filters, telemetering systems

Process Control Co., 2 East End Ave., New York 21, N. Y.
Designers and builders of electrical, mechanical and electronic controls for automatic equipment and processes

Process & Instruments, 15 Stone Ave., Brooklyn 33, N. Y.
Electronic, optical, and mechanical instruments for industrial and research use

Prodelin, Inc., 307 Bergen Ave., Kearny, N. J.
Coaxial transmission lines; broadcast antennas; parabolic microwave antennas; components

Production Instrument Div., General Controls Co. 8062 B McCormick Blvd., Skokie, Ill.
Electric & mechanical counting, timing & recording devices & actuating switches

Progress Electronics Co., 296 Broadway, New York 7, N. Y.
Cables, coaxial, Teflon; connectors; plugs

Progressive Service Co., 2745 Locust St., St. Louis, Mo.
Screw machine products

Proportioneers, Inc., 345 Harris Ave., Providence 1, R. I.
Automatic controlling and proportioning equipment

Propulsion Development Labs., 1120 El Segundo Blvd., El Segundo, Calif.
Gas flow pressure and temperature pick-up probes and rakes; development and calibration of new types

Pulsation Controls Corp., 1349 E. Main St., Santa Paula, Calif.
Suction & exhaust mutes; pulse traps, liquid and gas; shock traps; liquid blenders

Pittsburgh & Buffalo Representative
M. S. Jacobs & Associates, Inc.
810 Noblestown Rd., Pittsburgh 5, Pa. WA-1-6140
1807 Elmwood Ave., Buffalo 7, N.Y. DE-3229

Pulse Engineering, Inc., 2657 Spring St., Redwood City, Calif.
Pulse transformers; broad band transformers; wave filters; non-linear magnetic components

Pyle-National Co., 1334 N. Kostner Ave., Chicago 51, Ill.
Connectors; turbo generators

Pyramid Electric Co., 1445 Hudson Blvd., North Bergen, N. J.

Pyramid Instrument Corp., 630 Merrick Rd., Lynbrook, N. Y.
Electrical instruments; pyrometers

Pyramid Plastics, Inc., 554 W. Polk St., Chicago 7.
Custom extruders; tubing

Pyro-Electric Inc., 228 E. James St., Barrington, Ill.
Temperature sensing elements; thermocouples, pyrometer bulbs; wire

Pyrocones, Inc., Pataskala, Ohio
Instruments for control of firing of kilns

Pyroferric Co., Inc., 621 E. 216 St., Bronx 67, N. Y.
Powdered iron cores; mechanical assemblies

Pyrofilm Resistor Co., U.S. Highway #46, Parsippany, N. J.
Carbon-film resistors, glass sealed, high stability; high precision networks; coaxial attenuator elements

Pyrometer Co. of America, 600 E. Lincoln Highway, P.O. Box 154, Penndel, Penna.
Thermocouples; protecting tubes; pyrometric accessories

Pyrometer Instrument Co., Inc., Bergenfield 12, N. J.
Precision pyrometers for every plant and laboratory temperature measuring problem
(See advertisement on page 157)

Pittsburgh Representative
Bradshaw & Co.
311 Ross St., Pittsburgh 19, Pa.
COurt 1-2627

Pyrometer Service Co., 228 River Rd., Arlington, N. J.
Pyrometer tubes; thermocouples

Q

QOS Corp., 39 W. 60th St., New York 23, N. Y.
Infra-red night-viewing apparatus

QVS, Inc., 20 N. 15th St., East Orange, N. J.
Panel meters

Quaid Fabrications Inc., Rt. 73 & Spring Garden St., Palmyra, N. J.
Panels; autoclaves, fittings, ovens

Quaker City Gear Works, Inc., Red Lion & Philmont Rds., Bethayres, Penna.

Quality Electric Co., 3700 S. Broadway, Los Angeles 7, Calif.
Air/fuel ratio exhaust gas analyzers

Quartz Products Corp., 688 Somerset St., Watchung, N. J.

R

RCA Division, Radio Corporation of America, Camden, N. J.
Radio and electronic equipment for all purposes including laboratory and industrial apparatus

RCA Tube Div., Radio Corporation of America, 415 S. Fifth St., Harrison, N.J.
Electron tubes; testers; semiconductors; transistors

R.C.L. Mfg. Co., New Jersey Ave., Riverside, N. J.
Resistors and rheostats

RHO Engineering Co., 2242 Sepulveda Blvd., Los Angeles 64, Calif.
Potted circuits; potting compounds; resistors: encapsulated, precision, wirewound, subminiature

RKL Valve & Mfg. Co., Route 38 and Rudderrow Ave., Maple Shade, N. J.
Manual, air, electrically and hydraulically operated pinch type valves for all types of material handling and flow regulation

Pittsburgh Area Representative
W. A. Stoeltzing, Inc.
940 Western Ave., Pittsburgh 33, Pa.
ALlegheny 1-9400

R & M Mfg. Co., Royal Oak, Mich.
Machine shop gages

R-P & C Valve Div., American Chain & Cable Co. Inc., Reading, Pa.
Valves

RS Electronics Corp., P. O. Box 368, Station A, Palo Alto, Calif.
Radar sub-assemblies; laboratory test equipment; radar scanners

R-S Products Corp., 4523 Germantown Ave., Philadelphia 44, Pa.
Butterfly valves

Racine & Co., Inc., Jules, 20 West 47th St., New York 36, N. Y.
Stop watches; chronographs; laboratory and sporting goods; pocket and wrist chronographs
(See advertisement on page 202)

Radex Corp., 2076 Elston Ave., Chicago 14, Ill.
Electrostatic precipitators; odor absorbers; test equipment

Radial Metal Products, Inc., 1044 Linwood St., Brooklyn, N. Y.
Slip clutch couplings; torque limiting devices

Radiaphone Co., 600 E. Evergreen Ave., Monrovia, Calif.
Electrical and electronic instrumentation

Radiation, Inc., P. O. Drawer 37, Melbourne, Fla.
Digital data processing and telemetering equipment, converters; recorders; transmitters; amplifiers; transducers

Radiation Counter Labs., 5122 W. Grove St., Skokie, Ill.
Geiger-Mueller counters; radium detectors

Representative—N. Y., SW conn., N. J., E. Pa., Del.
M. J. Seavy & Sons
30 Church St., New York 7, N. Y.
COrtlandt 7-8025

Radiation Instrument Co., P. O. Box 733, Silver Spring, Md.
Power supplies, amplifiers

Radiation Instrument Development Lab., 5737 S. Halsted St., Chicago 21, Ill.
Radioactivity detecting and measuring instrumentation; laboratory apparatus; vacuum gages

Radiation Research Corporation, 140 E. 59th St., New York 22, N. Y.
312 Florida Ave., W. Palm Beach, Fla.
Nuclear batteries; special purpose capacitors

Radio City Products, Inc., Centre & Glendale Sts., Easton, Pa.
Electrical and radio testing instruments and accessories

Radio Condenser Co., Davis & Copewood Sts., Camden 3, N. J.
Variable, standard capacitors; tuners; magnetic clutches

Radio Corporation of America, Foot of Cooper St., Building 15-1, Camden 2, N. J.
Laboratory and industrial test instruments including r-f signal generators, impedance bridges and electronic voltmeters

Radio Development & Research Corp., 100 Pennsylvania Ave., Patterson 3, N. J.
Transistors, Rectifiers, Diodes

Radio Frequency Laboratories, Inc., Boonton 2, N. J.
Test and service equipment for electrical instrument calibration; crystal impedance meters; telemetering, telegraph and control terminals
(See advertisement on page 119)

California Representative
Luscombe Engineering Co.
1129 S. Fair Oaks, Pasadena, Calif. RY-1-3386
120 North "B" St., San Mateo, Calif. DI-2-7057

Radio Receptor Co., Inc., 240 Wythe Ave., Brooklyn 11, N. Y.
Selenium rectifiers; germanium diodes; dielectric heating equipment; communications equipment; navigational aids; microwave instrumentation and equipment

Authorized Distributor
Pioneer Electronic Supply Corp.
2115 Prospect Ave., Cleveland 15, Ohio
SUperior 1-9410

Radioactive Products, Inc., 6540 W. Congress St., Detroit 26, Mich.
Radiation survey instruments; electrical and testing instruments

Radionics, Inc., P.O. Box 186, Cockeysville, Md.
Amplifiers; counters; demodulators; filters; power supplies; relays

Rahm Instruments Div. of American Machine & Metals, Inc., 65 Rushmore St., Westbury, L. I., N. Y.
Potentiometer transducers for pressure, altitude, air speed and acceleration

Railway Communications Inc., 9351 E. 59th St., Raytown 33, Mo.
Oscilloscopes; voltmeters; filters

Rainhart Co., P. O. Box 4065, Austin 51, Texas
Soil compactors; concrete and soil testing instrumentation

Ram Meter, Inc., 1100 Hilton Rd., Ferndale 20, Mich.
Instrument shunts; power regulating equipment; thermal switch testers; telemetering load cycle counters

Ramapo Instrument Co., 1 Dey Lane, Riverdale, N. J.
Flow transducers (stainless steel), strain gage translated for measurement of transients; pressures up to 5000 psig, bi-directional measurement available
(See advertisement on page 93)

Ramo-Wooldridge Corp., Electronic Instrumentation Div., 5730 Arbor Vitae, Los Angeles 45, Calif.
Specialized electronic test equipment

Ramsey Engineering Co., 2451 University Ave., St. Paul 14, Minn.
Automatic control systems

Ranco, Inc., 601 West Fifth Ave., Columbus 1, Ohio
Refrigeration controls

Ransom Laboratories, John H., 6425 Crenshaw Blvd., Los Angeles 43, Calif.
Optical instruments and parts; modulation reticles

Ransom Research, P.O. Box 269, 323 W. 7th St., San Pedro, Calif.
Control systems; computer input controls; computer modular units

Rapid Electric Co., 2881 Middletown Rd., New York 61, N. Y.
Power supplies; rectifiers; components

Rapid Specialties Co., 327 W. Huron St., Chicago 10, Ill.
Test clips for motors, coils, electrical units
(See advertisement on page 59)

Rapidan Mfg. Co., Inc., Gordonsville, Virginia
Sheet metal and screw machine parts

Rapidesign, Inc., Box 592, Glendale, Calif

Rascher & Betzold, Inc., 730 N. Franklin St., Chicago 10, Ill.
Laboratory supplies

Ratigan Electronics, Inc., 425 W. Cypress St., Glendale 4, Calif.
Coils; delay lines; transformers

Rauland Corp., 4245 N. Knox Ave., Chicago 41, Ill
Cathode-ray tubes

Rauland-Borg Corp., 3535 W. Addison St., Chicago 18, Ill.
Amplifiers; audio-frequency equipment; microphones

Rawson Electrical Instrument Co., Inc., 112A Potter St., Cambridge 42, Mass.
Magnetic fluxmeters; electrostatic voltmeters; sine cosine potentiometers; low power factor watt meters

Ray-O-Vac Co., Div. of Electric Storage Battery Co. 212 E. Washington Ave., Madison, Wis
Dry batteries

Rayedon Co., 234 Rockingham Rd., Rosemont, Pa

Raybestos-Manhattan, Inc., Manhattan Rubber Div., 61 Willett St., Passaic, N. J.
Molded products; hose; abrasive and diamond wheels; packings; friction material

Raycon Corp., 248 Harbor Blvd., Belmont, Calif.
Counters

Raydyne Corp., 2715 So. Fourth St., Box 1147, Springfield, Ill.
Dynamic balancing machines

Raymond Engineering Laboratory, Inc., Smith St., Middletown, Conn.
Stepping switches; clockworks

Raypar, Inc., 7800 W. Addison St., Chicago 34, Ill.
Coils; power supplies; transformers

Raytheon Mfg. Co., 100 River St., Waltham 54, Mass
Automatic and manually controlled rectifiers for all communication, industrial or laboratory applications; marine equipment; industrial equipment; communication equipment; electronic components

Raytheon Mfg. Co., Equipment Sales Div., 100 River St., Waltham, Mass.
Radar systems and components; aircraft and marine navigation instrument; electronic components

Raytheon Mfg. Co., Industrial Tube Div., 55 Chapel St., Newton 58, Mass.
Miniature and subminiature tubes, electrometer and radiation measuring tubes

Raytheon Mfg. Co., Receiving Tube Div., 465 Centre St., Quincy, Mass.
Standard receiving and rectifier tubes

Raytheon Mfg. Co. Semiconductor Div., 215 First Ave. Needham Heights, Mass.
Semiconductor rectifiers, silicon and germanium transistors, diodes

Rea Magnet Wire Co., Inc., E. Pontiac St., Fort Wayne 4, Ind.
Copper enameled magnet wire—AWG sizes #10-#50

Recora Co., 6100 S. Archer Rd., Summit, Ill.
Floor-mat type extended area electrical switches; extended length hydraulic switches; control systems

Rectico, Inc., 963 Frelinghuysen Ave., Newark 8, N. J.
Metallic rectifier stacks

Red Jacket Co., Inc., 500 Bell Ave., Carnegie, Pa
Pinch valves

Pittsburgh & Buffalo Representative
M. S. Jacobs & Associates, Inc.
810 Noblestown Rd., Pittsburgh 5, Pa. WA-1-6140
1807 Elmwood Ave., Buffalo 7, N. Y. DE-3229

Red Point Corp., 1907 Riverside Drive, Glendale 1, Calif.
Impregnating equipment and materials; automatic encapsulating machines; high vacuum pumps

Redington Co., F. B., 3000 St. Charles Rd., Bellwood, Ill.
Cartoning and special packaging machinery

Redmond Co., Inc., Owosso, Mich
Fractional-hp motors

Reed Instrument Bearing Co., 4241 Redwood Ave., Los Angeles 66, Calif
Miniature ball bearings

Reed & Reese, Inc., 717 N. Lake Ave., Pasadena, Calif.
Stators; armatures; modulators; demodulators; peak notch and band pass filters

Reed Research, Inc., 1048 Potomac St., N.W., Washington 7, D. C.
Computers; oscillographs; analyzers

Reeves Hoffman Div., Dynamics Corp. of America, 145 Cherry St., Carlisle, Pa.
Piezoelectric and quartz crystals

Reeves Instrument Corp., Eastgate Blvd Roosevelt Field, Garden City, L.I., N. Y
Computers; allied components

Reeves Pulley Div., Reliance Electric Co., 1225 Seventh St., Columbus, Ind.
Variable-speed drives; variable-speed motor pulleys; variable spinning-frame drives; variable-speed-drive converters

Reeves Soundcraft Corp., 10 E. 52nd St., New York 22, N. Y.
Magnetic tapes, recording films, accessories

Reflectone Corp., Post Rd., Stamford, Conn.
Training aids; a-c, d-c power supplies; mechanical integrators

Refrigeration Systems, Inc., 646 W. Washington St., Chicago 6, Ill.
Temperature and humidity cabinets, cloud-and-pour oil testers

Regal Instrument Co., Inc., 25 Will Place, Brooklyn, N. Y.

Regal Plastic Co., 2800 East 14th St., Kansas City 27, Mo.
Thermoplastic materials; fiberglass molders

Regent Controls, Brown House Rd., Stamford, Conn
Control systems; circuit breakers

Reiner Electronics Co., Centre & Glendale Sts., Easton, Pa.
Electronic testing equipment

Reisner Mfg. Co., Inc., W. H., Hagerstown, Md

Riester & Thesmacher Co., 1526 W. 25th St., Cleveland 13, Ohio
Custom sheet metal products; chassis, panels, etc

Relay Sales, P.O. Box 186, West Chicago, Ill.
Distributor of relays, timers, switches, etc.

Relay Service Co., 1310-12 N. Pulaski Rd., Chicago 51, Ill.
Relays

Reliance Electric & Engineering Co., 24701 Euclid Ave., Cleveland 17, Ohio
Motors; generators; tachometers; regulators

Reliance Gauge Column Co., 5002 Carnegie Ave., Cleveland 3, Ohio
Level indicators

Reliance Instr. Mfg. Corp., 190 Glen Cove Ave., Glen Cove, L. I., N. Y.
Automatic control systems for furnaces, boilers, reactors, etc; valve-operating devices

Reliant Industries, 4947 Firestone Blvd., South Gate, Calif.
Dimensional gaging equipment

Remco, Inc., Zelienople, Pa
Liquid level indicators

Remington Rand, Div. Sperry Rand Corp., 315 Fourth Ave., New York 10, N. Y.
Computers; microfilm cameras

Remler Co., 2101 Bryant St., San Francisco 10, Calif.
Airborne public address systems; microphones; handsets, transistorized amplifiers, chassis, packaging

Renbrandt Inc., Parmelee St., Boston 18, Mass.
Flexible couplings for servo-mechanisms, computers, electro-mechanical instruments

Renick Co., L. C., 30 S. Salsipuedes St., Santa Barbara, Calif.
Machine divided scales, verniers and dials; linear and circular machine dividing; precision reticles and glass scales; machine engraving
(See advertisement on page 173)

Reon Resistor Corp., 117 Stanley Ave., Yonkers, N. Y.
Wire-wound resistors; variable carbon composition controls

Republic Flow Meters Co., 2240 Diversey Parkway, Chicago 47, Ill.
Remote reading flow meters; power plant, industrial instruments for flow, level, pressure, draft, temperature and CO_2; automatic boiler controls; regulators; valves; desuperheater

Republic Gage Co., 2228 Fenkel Ave., Detroit 38, Mich.
Dimensional gages

Republic Lens Co., 31 East 169th St., Bronx 52, N. Y.
Precision optics for science and industry

Republic Mfg. Co., 15655 Brook Park Rd., Cleveland 11, Ohio
Relief valves; regulating valves; turn-and-bank indicators; pressure snubbers

Distributor
Williams and Co., Inc., The House of Metals
Cleveland, Cincinnati, Columbus, Toledo, Ohio; Louisville, Ky.; Pittsburgh, Pa.

Rese Engineering Co., 731 Arch St., Philadelphia 6, Pa.
Electrical and electronic instrumentation, digital computer components; high-speed digital memory equipment, control systems

Research Appliance Co., Route 8 & Craighead Rd., Allison Park, Penna.
Chemical feed pumps; automatic air samplers
(See advertisement on page 86)

Research Control Instrument Co., P. O. Box 615, W. Tulsa 7, Okla

Research Controls, Box 5035, Tulsa, Okla.
Automatic and manual controllers; valves; components

Rep—W. Pa., W. Va., Md. Panhdle, Ohio bdr.
Sentinel Products Co. (Wayne B. Farley)
36 Beltzhoover Ave., Pittsburgh 10, Pa
HEmlock 1-0771

Research Development Manufacture, Inc., 429 E. Collum St., Philadelphia 44, Pa
Precision mechanical components; gears, cams, etc

Research Engineering Inc., Plainfield, N. J

Research, Inc., 115 N. Buchanan Ave., Hopkins, Minn.
Temperature controllers; heating devices

Research Specialties Co., 200 S. Garrard Ave., Richmond, Calif.
Radiochemicals; chromatography equipment; electrophoresis apparatus; power supplies; constant temperature baths; micro-pipettes; zone melters

Resinite Dept., The Borden Co., Chem. Div., P. O. Box 1589, Santa Barbara, Calif.
Vinyl insulation sleevings; tapes; lacing cords

Resistance Products Co., 914 S. 13th St., Harrisburg, Pa.
Resistors, wire-wound, high voltage

Resistoflex Corp., 39 Plansoen St., Belleville 9, N. J.

Resistors, Inc., 5226 West 26 St., Chicago 50, Ill
Resistors, adjustable, variable and wire wound

Retron Corp., 717 N. Lake Ave., Pasadena, Calif.
Linear motion potentiometers and multi-turn potentiometers

Revco Inc., 1900 Lyndale Ave., South, Minneapolis 5, Minn.
Automatic speed controllers; variable-speed drives

Revere Copper and Brass Inc., 230 Park Ave., New York 17, N. Y.
Copper; copper alloys; aluminum alloys

Revere Corporation of America, P. O. Box 304, Wallingford, Conn.
Thermocouples for liquids, air, metal, hot gases; thermocouple wire, harnesses and leads; Pitot tubes (shielded and unshielded) engine and flight test recording accessories; aviation fuel system components

Rex Corp., Hayward Rd., West Acton, Mass

Rex Rheostat Co., 3 Foxhurst Rd., Baldwin L. I., N. Y.
Protected and unprotected slide-contact rheostats and adjustable, wire wound resistors

Reynolds Electric Co., 3000 River Rd., River Grove, Ill.
Electric mixers; motor driven controls; air circulators; traffic signals; motors; thermatic flashers

Reynolds Gas Regulator Co., Andersin, Inc.
Automatic valves and regulators

Reynolds Metals Co., 2500 S. 3rd St., Louisville 1, Ky
Aluminum tubing and products

Rheem Manufacturing Co., Electronics Div., 7777 Industry Ave., Riviera, Calif.
Amplifiers; voltage regulators; power suppliers; temperature systems for airborne applications; telemetering and data handling systems

Preiser Co., Inc., B., P. O. Box 6118, Charleston 2, W. Va.
Laboratory equipment and supplies

Premier Metal Products Co., 337 Manida St., New York 59, N. Y.
Instrument chassis and cabinets
(See advertisement on page 51)

Premier Metal Works, Inc, 1616 S. Clinton St. Chicago 16, Ill.

Premier Research Laboratories, Inc. 81 Seventh Ave New York 11, N. Y.
Quartz crystal units; frequency control crystals; ovens for electronic component stability; tourmaline crystals; crystals for transducers; crystal holders

Presin Co., 12128 W. Pico Blvd., Los Angeles 64, Calif.
Program controllers; counters; totalizers; tachometers

Pressure Products Industries, Inc., Hatboro, Pa.
Pressure instrumentation; pumps; autoclaves; valves; components

Presto Recording Corp., Paramus, N. J.
Magnetic tape recorder

Price Electric Corp., Church & 2nd Sts., Frederick Md.
Relays, aircraft and electronic

Printed Electronics Corp., 7 North Ave., Natick Mass.
Printed circuits; lab-production print-c. machines

Pritchard & Co. of Calif., J. F., 4625 Roanoke Pkwy., Kansas City 12, Mo.
Instrument air dryers

Probescope Co., 8 Sagamore Hill Dr., Port Washington, N. Y.
Spectrum analyzers; phase analyzers; synchronous sweep generators; miniature and multiple channel oscilloscopes, filters, telemetering systems

Process Control Co., 2 East End Ave., New York 21, N. Y.
Designers and builders of electrical, mechanical and electronic controls for automatic equipment and processes

Process & Instruments, 15 Stone Ave., Brooklyn 33, N. Y.
Electronic, optical, and mechanical instruments for industrial and research use

Prodelin, Inc., 307 Bergen Ave., Kearny, N. J.
Coaxial transmission lines; broadcast antennas; parabolic microwave antennas; components

Production Instrument Div., General Controls Co. 8062 B McCormick Blvd., Skokie, Ill.
Electric & mechanical counting, timing & recording devices & actuating switches

Progress Electronics Co., 296 Broadway, New York 7, N. Y.
Cables, coaxial, Teflon; connectors; plugs

Progressive Service Co. 2745 Locust St. St. Louis Mo.
Screw machine products

Proportioneers, Inc., 345 Harris Ave., Providence 1 R. I.
Automatic controlling and proportioning equipment

Propulsion Development Labs., 1120 El Segundo Blvd., El Segundo, Calif.
Gas flow pressure and temperature pick-up probes and rakes; development and calibration of new types

Pulsation Controls Corp., 1349 E. Main St., Santa Paula, Calif.
Suction & exhaust mutes; pulse traps, liquid and gas; shock traps; liquid blenders

Pittsburgh & Buffalo Representative
M. S. Jacobs & Associates, Inc.
810 Noblestown Rd., Pittsburgh 5, Pa. WA-1-6140
1807 Elmwood Ave., Buffalo 7, N.Y. DE-3229

Pulse Engineering, Inc., 2657 Spring St., Redwood City, Calif.
Pulse transformers; broad band transformers; wave filters; non-linear magnetic components

Pyle-National Co., 1334 N. Kostner Ave., Chicago 51, Ill.
Connectors; turbo generators

Pyramid Electric Co., 1445 Hudson Blvd., North Bergen, N. J.

Pyramid Instrument Corp., 630 Merrick Rd., Lynbrook, N. Y.
Electrical instruments; pyrometers

Pyramid Plastics, Inc., 554 W. Polk St. Chicago 7.
Custom extruders; tubing

Pyro-Electric Inc., 228 E. James St., Barrington Ill
Temperature sensing elements; thermocouples; pyrometer bulbs; wire

Pyrocones, Inc., Pataskala, Ohio
Instruments for control of firing of kilns

Pyroferric Co., Inc., 621 E. 216 St., Bronx 67, N. Y
Powdered iron cores; mechanical assemblies

Pyrofilm Resistor Co., U.S. Highway #46, Parsippany, N. J.
Carbon-film resistors, glass sealed, high stability; high precision networks; coaxial attenuator elements

Pyrometer Co. of America, 600 E. Lincoln Highway P.O. Box 154, Penndel, Penna.
Thermocouples: protecting tubes; pyrometric accessories

Pyrometer Instrument Co., Inc., Bergenfield 12, N. J.
Precision pyrometers for every plant and laboratory temperature measuring problem
(See advertisement on page 157)

Pittsburgh Representative
Bradshaw & Co.
311 Ross St., Pittsburgh 19, Pa
COurt 1-2627

Pyrometer Service Co., 228 River Rd., Arlington N. J.
Pyrometer tubes; thermocouples

Q

QOS Corp., 39 W. 60th St., New York 23, N. Y
Infra-red night-viewing apparatus

QVS, Inc., 20 N. 15th St. East Orange N. J.
Panel meters

Quaid Fabrications Inc. Rt. 73 & Spring Garden St Palmyra, N. J.
Panels; autoclaves, fittings, ovens

Quaker City Gear Works Inc., Red Lion & Philmont Rds., Bethayres, Penna.

Quality Electric Co. 3700 S. Broadway Los Angeles 7, Calif.
Air/fuel ratio exhaust gas analyzers

Quartz Products Corp., 688 Somerset St., Watchung N. J.

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Potted circuits; potting compounds; resistors: encapsulated, precision, wirewound, subminiature

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Radar sub-assemblies; laboratory test equipment; radar scanners

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Butterfly valves

Racine & Co., Inc., Jules, 20 West 47th St., New York 36, N. Y.
Stop watches; chronographs; laboratory and sporting goods; pocket and wrist chronographs
(See advertisement on page 202)

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Electrostatic precipitators; odor absorbers; test equipment

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Geiger-Mueller counters; radium detectors

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M. J. Seavy & Sons
30 Church St., New York 7, N. Y
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312 Florida Ave., W. Palm Beach, Fla.
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Variable standard capacitors; tuners; magnetic clutches

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Test and service equipment for electrical instrument calibration; crystal impedance meters; telemetering; telegraph and control terminals
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Raybestos-Manhattan, Inc., Manhattan Rubber Div., 61 Willett St., Passaic, N. J.
Molded products; hose; abrasive and diamond wheels; packings; friction material

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Raydyne Corp., 2715 So. Fourth St., Box 1147, Springfield, Ill.
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Raymond Engineering Laboratory, Inc., Smith St. Middletown, Conn.
Stepping switches; clockworks

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Radar systems and components; aircraft and marine navigation instrument; electronic components

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Semiconductor rectifiers, silicon and germanium transistors, diodes

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1807 Elmwood Ave., Buffalo 7, N. Y. DE-3229

Red Point Corp., 1907 Riverside Drive, Glendale 1, Calif.
Impregnating equipment and materials; automatic encapsulating machines; high vacuum pumps

Redington Co., F. B., 3000 St. Charles Rd., Bellwood, Ill.
Cartoning and special packaging machinery

Redmond Co., Inc., Owosso, Mich.
Fractional-hp motors

Reed Instrument Bearing Co., 4241 Redwood Ave. Los Angeles 66, Calif.
Miniature ball bearings

Reed & Reese, Inc., 717 N. Lake Ave., Pasadena, Calif.
Stators; armatures; modulators; demodulators; peak notch and band pass filters

Reed Research, Inc., 1048 Potomac St., N.W., Washington 7, D. C.
Computers; oscillographs; analyzers

Reeves Hoffman Div., Dynamics Corp. of America 145 Cherry St., Carlisle, Pa.
Piezoelectric and quartz crystals

Reeves Instrument Corp., Eastgate Blvd Roosevelt Field, Garden City, L.I., N. Y.
Computers; allied components

Reeves Pulley Div., Reliance Electric Co., 1225 Seventh St., Columbus, Ind.
Variable speed drives; variable-speed motor pulleys; variable spinning-frame drives; variable-speed-drive converters

Reeves Soundcraft Corp., 10 E. 52nd St., New York 22, N. Y.
Magnetic tapes, recording films, accessories

Reflectone Corp., Post Rd., Stamford, Conn.
Training aids; a-c, d-c power supplies; mechanical integrators

Refrigeration Systems, Inc., 646 W. Washington St. Chicago 6, Ill.
Temperature and humidity cabinets, cloud-and-pour oil testers

Regal Instrument Co., Inc., 25 Will Place Brooklyn, N. Y.

Regal Plastic Co., 2800 East 14th St., Kansas City 27 Mo.
Thermoplastic materials; fiberglass molders

Regent Controls, Brown House Rd., Stamford, Conn.
Control systems; circuit breakers

Reiner Electronics Co., Centre & Glendale Sts., Easton, Pa.
Electronic testing equipment

Reisner Mfg. Co., Inc., W. H., Hagerstown, Md.

Riester & Thesmacher Co., 1526 W. 25th St., Cleveland 13, Ohio
Custom sheet metal products; chassis, panels, etc.

Relay Sales, P.O. Box 186, West Chicago, Ill.
Distributor of relays, timers, switches, etc.

Relay Service Co., 1310-12 N. Pulaski Rd., Chicago 51, Ill.
Relays

Reliance Electric & Engineering Co., 24701 Euclid Ave., Cleveland 17, Ohio
Motors; generators; tachometers; regulators

Reliance Gauge Column Co., 5902 Carnegie Ave., Cleveland 3, Ohio
Level indicators

Reliance Instr. Mfg. Corp., 190 Glen Cove Ave., Glen Cove, L. I., N. Y.
Automatic control systems for furnaces, boilers, reactors, etc; valve-operating devices

Reliant Industries, 4947 Firestone Blvd., South Gate Calif.
Dimensional gaging equipment

Remco, Inc., Zelienople, Pa.
Liquid level indicators

Remington Rand, Div. Sperry Rand Corp., 315 Fourth Ave., New York 10, N. Y.
Computers; microfilm cameras

Remler Co., 2101 Bryant St., San Francisco 10, Calif.
Airborne public address systems; microphones; handsets, transistorized amplifiers, chassis, packaging

Renbrandt Inc., Parmelee St., Boston 18, Mass.
Flexible couplings for servo-mechanisms, computers, electro-mechanical instruments

Renick Co., L. C., 30 S. Salsipuedes St., Santa Barbara, Calif.
Machine divided scales, verniers and dials; linear and circular machine dividing; precision reticles and glass scales; machine engraving
(See advertisement on page 173)

Reon Resistor Corp., 117 Stanley Ave., Yonkers, N. Y.
Wire-wound resistors; variable carbon composition controls

Republic Flow Meters Co., 2240 Diversey Parkway Chicago 47, Ill.
Remote reading flow meters; power plant, industrial instruments for flow, level, pressure, draft, temperature and CO_2; automatic boiler controls; regulators; valves; desuperheater

Republic Gage Co., 2228 Fenkel Ave., Detroit 38, Mich.
Dimensional gages

Republic Lens Co., 31 East 169th St., Bronx 52, N. Y.
Precision optics for science and industry

Republic Mfg. Co., 15655 Brook Park Rd., Cleveland 11, Ohio
Relief valves; regulating valves; turn-and-bank indicators; pressure snubbers

Distributor
Williams and Co., Inc., The House of Metals
Cleveland, Cincinnati, Columbus, Toledo, Ohio; Louisville, Ky; Pittsburgh, Pa.

Rese Engineering Co., 731 Arch St., Philadelphia 6, Pa.
Electrical and electronic instrumentation, digital computer components; high-speed digital memory equipment, control systems

Research Appliance Co., Route 8 & Craighead Rd., Allison Park, Penna.
Chemical feed pumps; automatic air samplers
(See advertisement on page 86)

Research Control Instrument Co., P. O. Box 615, W Tulsa 7, Okla.

Research Controls, Box 5035, Tulsa, Okla.
Automatic and manual controllers; valves; components

Rep—W. Pa., W. Va., Md. Panhdle. Ohio bdr.
Sentinel Products Co. (Wayne B. Farley)
36 Beltzhoover Ave., Pittsburgh 10, Pa.
HEmlock 1-0774

Research Development Manufacture, Inc., 429 E. Cellum St., Philadelphia 44, Pa.
Precision mechanical components; gears, cams, etc.

Research Engineering Inc., Plainfield, N. J.

Research, Inc., 115 N. Buchanan Ave., Hopkins, Minn.
Temperature controllers; heating devices

Research Specialties Co., 200 S. Garrard Ave., Richmond, Calif.
Radiochemicals; chromatography equipment; electrophoresis apparatus; power supplies; constant temperature baths; micro-pipettes; zone melters

Resinite Dept., The Borden Co., Chem. Div., P. O. Box 1589, Santa Barbara, Calif.
Vinyl insulation sleevings; tapes; lacing cords

Resistance Products Co., 914 S. 13th St., Harrisburg, Pa.
Resistors, wire-wound, high voltage

Resistoflex Corp., 39 Plansoen St., Belleville 9, N. J.

Resistors, Inc., 5226 West 26 St., Chicago 50, Ill.
Resistors, adjustable, variable and wire wound

Retron Corp., 717 N. Lake Ave., Pasadena, Calif.
Linear motion potentiometers and multi-turn potentiometers

Revco Inc., 1900 Lyndale Ave., South, Minneapolis 5, Minn.
Automatic speed controllers; variable-speed drives

Revere Copper and Brass Inc., 230 Park Ave., New York 17, N. Y.
Copper; copper alloys; aluminum alloys

Revere Corporation of America, P. O. Box 304, Wallingford, Conn.
Thermocouples for liquids, air, metal, hot gases; thermocouple wire, harnesses and leads; Pitot tubes (shielded and unshielded) engine and flight test recording accessories; aviation fuel system components

Rex Corp., Hayward Rd., West Acton, Mass.

Rex Rheostat Co., 3 Foxhurst Rd., Baldwin L. I., N. Y.
Protected and unprotected slide-contact rheostats and adjustable, wire wound resistors

Reynolds Electric Co., 3000 River Rd., River Grove, Ill.
Electric mixers; motor driven controls; air circulators; traffic signals; motors; thermatic flashers

Reynolds Gas Regulator Co., Andersin, Inc.
Automatic valves and regulators

Reynolds Metals Co., 2500 S. 3rd St., Louisville 1, Ky.
Aluminum tubing and products

Rheem Manufacturing Co., Electronics Div., 7777 Industry Ave., Riviera, Calif.
Amplifiers; voltage regulators; power suppliers; temperature systems for airborne applications; telemetering and data handling systems

Preiser Co., Inc., B., P. O. Box 6118. Charleston 2. W. Va.
Laboratory equipment and supplies

Premier Metal Products Co., 337 Manida St., New York 59, N. Y.
Instrument chassis and cabinets
(See advertisement on page 51)

Premier Metal Works, Inc, 1616 S. Clinton St. Chicago 16, Ill.

Premier Research Laboratories, Inc. 81 Seventh Ave New York 11, N. Y.
Quartz crystal units; frequency control crystals; ovens for electronic component stability; tourmaline crystals, crystals for transducers; crystal holders

Presin Co., 12128 W. Pico Blvd., Los Angeles 64, Calif.
Program controllers; counters; totalizers; tachometers

Pressure Products Industries, Inc., Hatboro, Pa.
Pressure instrumentation; pumps; autoclaves; valves, components

Presto Recording Corp., Paramus, N. J.
Magnetic tape recorder

Price Electric Corp., Church & 2nd Sts., Frederick Md.
Relays, aircraft and electronic

Printed Electronics Corp., 7 North Ave., Natick Mass.
Printed circuits; lab production print-c. machines

Pritchard & Co. of Calif., J. F., 4625 Roanoke Pkwy., Kansas City 12, Mo.
Instrument air dryers

Probescope Co., 8 Sagamore Hill Dr., Port Washington, N. Y.
Spectrum analyzers; phase analyzers; synchronous sweep generators; miniature and multiple channel oscilloscopes, filters, telemetering systems

Process Control Co., 2 East End Ave., New York 21, N. Y.
Designers and builders of electrical, mechanical and electronic controls for automatic equipment and processes

Process & Instruments, 15 Stone Ave., Brooklyn 33, N. Y.
Electronic, optical, and mechanical instruments for industrial and research use

Prodelin, Inc., 307 Bergen Ave., Kearny, N. J.
Coaxial transmission lines; broadcast antennas; parabolic microwave antennas; components

Production Instrument Div., General Controls Co. 8062 B McCormick Blvd., Skokie, Ill.
Electric & mechanical counting, timing & recording devices & actuating switches

Progress Electronics Co., 296 Broadway, New York 7, N. Y.
Cables, coaxial, Teflon; connectors; plugs

Progressive Service Co., 2745 Locust St., St. Louis Mo.
Screw machine products

Proportioneers, Inc., 345 Harris Ave., Providence 1 R. I.
Automatic controlling and proportioning equipment

Propulsion Development Labs., 1120 El Segundo Blvd., El Segundo, Calif.
Gas flow pressure and temperature pick-up probes and rakes; development and calibration of new types

Pulsation Controls Corp., 1349 E. Main St., Santa Paula, Calif.
Suction & exhaust mutes; pulse traps, liquid and gas; shock traps; liquid blenders

Pittsburgh & Buffalo Representative
M. S. Jacobs & Associates, Inc.
810 Noblestown Rd., Pittsburgh 5, Pa. WA-1-6140
1807 Elmwood Ave., Buffalo 7, N.Y. DE-3229

Pulse Engineering, Inc., 2657 Spring St., Redwood City, Calif.
Pulse transformers; broad band transformers; wave filters; non-linear magnetic components

Pyle-National Co., 1334 N. Kostner Ave., Chicago 51, Ill.
Connectors; turbo generators

Pyramid Electric Co., 1445 Hudson Blvd., North Bergen, N. J.

Pyramid Instrument Corp., 630 Merrick Rd., Lynbrook, N. Y.
Electrical instruments; pyrometers

Pyramid Plastics, Inc., 554 W. Polk St., Chicago 7.
Custom extruders; tubing

Pyro-Electric Inc., 228 E. James St., Barrington Ill.
Temperature sensing elements; thermocouples; pyrometer bulbs; wire

Pyrocones, Inc., Pataskala, Ohio
Instruments for control of firing of kilns

Pyroferric Co., Inc., 621 E. 216 St., Bronx 67, N. Y.
Powdered iron cores; mechanical assemblies

Pyrofilm Resistor Co., U.S. Highway #46, Parsippany, N. J.
Carbon-film resistors, glass sealed, high stability; high precision networks; coaxial attenuator elements

Pyrometer Co. of America, 600 E. Lincoln Highway P.O. Box 154, Penndel, Penna.
Thermocouples; protecting tubes; pyrometric accessories

Pyrometer Instrument Co., Inc., Bergenfield 12, N. J.
Precision pyrometers for every plant and laboratory temperature measuring problem
(See advertisement on page 157)

Pittsburgh Representative
Bradshaw & Co.
311 Ross St., Pittsburgh 19, Pa
COurt 1-2627

Pyrometer Service Co., 228 River Rd., Arlington N. J.
Pyrometer tubes; thermocouples

Q

QOS Corp., 39 W. 60th St., New York 23, N. Y.
Infra-red night-viewing apparatus

QVS, Inc., 20 N. 15th St., East Orange N. J.
Panel meters

Quaid Fabrications Inc., Rt. 73 & Spring Garden St. Palmyra, N. J.
Panels; autoclaves, fittings, ovens

Quaker City Gear Works Inc., Red Lion & Philmont Rds., Bethayres, Penna.

Quality Electric Co., 3700 S. Broadway, Los Angeles 7, Calif.
Air/fuel ratio exhaust gas analyzers

Quartz Products Corp., 688 Somerset St., Watchung, N. J.

R

RCA Division, Radio Corporation of America, Camden, N. J.
Radio and electronic equipment for all purposes including laboratory and industrial apparatus

RCA Tube Div., Radio Corporation of America, 415 S. Fifth St., Harrison, N.J.
Electron tubes; testers; semiconductors; transistors

R.C.L. Mfg. Co., New Jersey Ave., Riverside, N. J.
Resistors and rheostats

RHO Engineering Co. 2242 Sepulveda Blvd. Los Angeles 64, Calif.
Potted circuits; potting compounds; resistors: encapsulated, precision, wirewound, subminiature

RKL Valve & Mfg. Co., Route 38 and Rudderrow Ave., Maple Shade, N. J.
Manual, air, electrically and hydraulically operated pinch type valves for all types of material handling and flow regulation
Pittsburgh Area Representative
W. A. Stoeltzing, Inc.
940 Western Ave., Pittsburgh 33 Pa
ALlegheny 1-9400

R & M Mfg. Co., Royal Oak, Mich
Machine shop gages

R-P & C Valve Div., American Chain & Cable Co. Inc., Reading, Pa.
Valves

RS Electronics Corp., P. O. Box 368, Station A. Palo Alto, Calif.
Radar sub-assemblies; laboratory test equipment; radar scanners

R-S Products Corp., 4523 Germantown Ave., Philadelphia 44, Pa.
Butterfly valves

Racine & Co., Inc., Jules, 20 West 47th St., New York 36, N. Y.
Stop watches; chronographs; laboratory and sporting goods; pocket and wrist chronographs
(See advertisement on page 202)

Radex Corp., 2076 Elston Ave., Chicago 14, Ill.
Electrostatic precipitators; odor absorbers; test equipment

Radial Metal Products, Inc., 1044 Linwood St., Brooklyn, N. Y.
Slip clutch couplings; torque limiting devices

Radiaphone Co., 600 E. Evergreen Ave., Monrovia, Calif.
Electrical and electronic instrumentation

Radiation, Inc., P. O. Drawer 37, Melbourne, Fla.
Digital data processing and telemetering equipment, converters; recorders; transmitters; amplifiers; transducers

Radiation Counter Labs., 5122 W. Grove St., Skokie, Ill.
Geiger-Mueller counters; radium detectors

Representative—N. Y., SW conn., N. J., E. Pa., Del.
M. J. Seavy & Sons
30 Church St., New York 7, N. Y.
COrtlandt 7-8025

Radiation Instrument Co., P. O. Box 733, Silver Spring, Md.
Power supplies; amplifiers

Radiation Instrument Development Lab., 5737 S. Halsted St., Chicago 21, Ill.
Radioactivity detecting and measuring instrumentation; laboratory apparatus; vacuum gages

Radiation Research Corporation, 140 E. 59th St. New York 22, N. Y.
312 Florida Ave., W. Palm Beach, Fla.
Nuclear batteries; special purpose capacitors

Radio City Products, Inc., Centre & Glendale Sts. Easton, Pa.
Electrical and radio testing instruments and accessories

Radio Condenser Co., Davis & Copewood Sts., Camden 3, N. J.
Variable standard capacitors; tuners; magnetic clutches

Radio Corporation of America, Foot of Cooper St. Building 15-1, Camden 2, N. J.
Laboratory and industrial test instruments including r-f signal generators, impedance bridges and electronic voltmeters

Radio Development & Research Corp. 100 Pennsylvania Ave., Patterson 3, N. J.
Transistors, Rectifiers, Diodes

Radio Frequency Laboratories, Inc., Boonton 2, N. J.
Test and service equipment for electrical instrument calibration; crystal impedance meters; telemetering; telegraph and control terminals
(See advertisement on page 119)

California Representative
Luscombe Engineering Co.
1129 S. Fair Oaks, Pasadena, Calif. RY-1-3386
120 North "B" St., San Mateo, Calif. DI-2-7057

Radio Receptor Co. Inc., 240 Wythe Ave., Brooklyn 11, N. Y.
Selenium rectifiers; germanium diodes; dielectric heating equipment; communications equipment; navigational aids; microwave instrumentation and equipment

Authorized Distributor
Pioneer Electronic Supply Corp.
2115 Prospect Ave., Cleveland 15, Ohio
SUperior 1-9410

Radioactive Products, Inc., 6540 W. Congress St., Detroit 26, Mich.
Radiation survey instruments; electrical and testing instruments

Radionics, Inc., P.O. Box 186, Cockeysville, Md.
Amplifiers; counters; demodulators; filters; power supplies; relays

Rahm Instruments Div. of American Machine & Metals, Inc., 65 Rushmore St., Westbury, L. I., N. Y.
Potentiometer transducers for pressure, altitude, air speed and acceleration

Railway Communications Inc., 9351 E. 59th St., Raytown 33, Mo.
Oscilloscopes; voltmeters; filters

Rainhart Co., P. O. Box 4065, Austin 51, Texas
Soil compactors; concrete and soil testing instrumentation

Ram Meter, Inc., 1100 Hilton Rd., Ferndale 20, Mich.
Instrument shunts; power regulating equipment; thermal switch testers; telemetering load cycle counters

Ramapo Instrument Co., 1 Dey Lane, Riverdale, N. J.
Flow transducers (stainless steel), strain gage translated for measurement of transients; pressures up to 5000 psig, bi-directional measurement available
(See advertisement on page 93)

Ramo-Wooldridge Corp., Electronic Instrumentation Div., 5730 Arbor Vitae, Los Angeles 45, Calif.
Specialized electronic test equipment

Ramsey Engineering Co., 2151 University Ave., St. Paul 14, Minn.
Automatic control systems

Ranco, Inc., 601 West Fifth Ave., Columbus 1, Ohio
Refrigeration controls

Ransom Laboratories, John H., 6425 Crenshaw Blvd., Los Angeles 43, Calif.
Optical instruments and parts; modulation reticles

Ransom Research, P.O. Box 269, 323 W. 7th St San Pedro, Calif
Control systems; computer input controls; computer modular units

Rapid Electric Co., 2881 Middletown Rd., New York 61, N. Y.
Power supplies; rectifiers; components

Rapid Specialties Co., 327 W. Huron St., Chicago 10, Ill.
Test clips for motors, coils, electrical units
(See advertisement on page 59)

Rapidan Mfg. Co., Inc., Gordonsville, Virginia
Sheet metal and screw machine parts

Rapidesign, Inc., Box 592, Glendale, Calif

Rascher & Betzold, Inc., 730 N. Franklin St., Chicago 10, Ill.
Laboratory supplies

Ratigan Electronics, Inc., 425 W. Cypress St., Glendale 4, Calif.
Coils; delay lines; transformers

Rauland Corp., 4245 N. Knox Ave., Chicago 41, Ill
Cathode-ray tubes

Rauland-Borg Corp., 3535 W. Addison St., Chicago 18, Ill.
Amplifiers; audio-frequency equipment; microphones

Rawson Electrical Instrument Co., Inc., 112A Potter St., Cambridge 42, Mass.
Magnetic fluxmeters; electrostatic voltmeters; sine cosine potentiometers; low power factor watt meters

Ray-O-Vac Co., Div. of Electric Storage Battery Co., 212 E. Washington Ave., Madison, Wis
Dry batteries

Rayedon Co., 234 Rockingham Rd., Rosemont, Pa

Raybestos-Manhattan, Inc., Manhattan Rubber Div., 61 Willett St., Passiac, N. J.
Molded products; hose; abrasive and diamond wheels; packings; friction material

Raycon Corp., 248 Harbor Blvd., Belmont, Calif
Counters

Raydyne Corp., 2715 So. Fourth St., Box 1147, Springfield, Ill.
Dynamic balancing machines

Raymond Engineering Laboratory, Inc., Smith St Middletown, Conn
Stepping switches; clockworks

Raypar, Inc., 7800 W. Addison St., Chicago 34, Ill
Coils; power supplies; transformers

Raytheon Mfg. Co., 100 River St., Waltham 54, Mass
Automatic and manually controlled rectifiers for all communication, industrial or laboratory applications; marine equipment; industrial equipment; communication equipment; electronic components

Raytheon Mfg. Co., Equipment Sales Div., 100 River St., Waltham, Mass.
Radar systems and components; aircraft and marine navigation instrument; electronic components

Raytheon Mfg. Co., Industrial Tube Div., 55 Chapel St., Newton 58, Mass.
Miniature and subminiature tubes, electrometer and radiation measuring tubes

Raytheon Mfg. Co., Receiving Tube Div., 465 Centre St., Quincy, Mass.
Standard receiving and rectifier tubes

Raytheon Mfg. Co. Semiconductor Div., 215 First Ave Needham Heights, Mass
Semiconductor rectifiers, silicon and germanium transistors, diodes

Rea Magnet Wire Co., Inc., E. Pontiac St., Fort Wayne 4, Ind.
Copper enameled magnet wire—AWG sizes #10-#50

Recora Co., 6100 S. Archer Rd., Summit, Ill.
Floor-mat type extended area electrical switches; extended length hydraulic switches; control systems

Rectico, Inc., 963 Frelinghuysen Ave., Newark 8, N. J.
Metallic rectifier stacks

Red Jacket Co., Inc., 500 Bell Ave., Carnegie, Pa
Pinch valves

Pittsburgh & Buffalo Representative
M. S. Jacobs & Associates, Inc.
810 Noblestown Rd., Pittsburgh 5, Pa. WA-1-6140
1807 Elmwood Ave., Buffalo 7, N. Y. DE-3229

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36 Beltzhoover Ave., Pittsburgh 10, Pa
HEmlock 1-0774

Research Development Manufacture, Inc., 429 E Collum St., Philadelphia 44, Pa
Precision mechanical components; gears, cams, etc

Research Engineering Inc., Plainfield, N. J.

Research, Inc., 115 N. Buchanan Ave., Hopkins, Minn.
Temperature controllers; heating devices

Research Specialties Co., 200 S. Garrard Ave., Richmond, Calif.
Radiochemicals; chromatography equipment; electrophoresis apparatus; power supplies; constant temperature baths; micro-pipettes; zone melters

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Aluminum tubing and products

Rheem Manufacturing Co., Electronics Div., 7777 Industry Ave., Riviera, Calif
Amplifiers; voltage regulators; power suppliers; temperature systems for airborne applications; telemetering and data handling systems

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★ INSULATORS
★ TERMINAL HEADS

Low prices for top quality
Prompt shipment from stock

ARKLAY S. RICHARDS CO., INC.
Manufacturers of
Pyrometer Supplies Since 1938
52 Winchester Street
NEWTON HIGHLANDS 61, MASS.

For more information circle 389 on inquiry card.

Rhodes Inc., M. H., 30 Bartholomew Ave., Hartford 6, Conn.
Mechanical Interval time switches; bell signal timers

Rhodes & Co., James H., 157 W. Hubbard St., Chicago 10, Ill.

Richards Co., Inc., Arklay S., 52 Winchester St., Newton Highland 61, Mass.
Thermocouples, lead wire and protection tubes
(See advertisement on page 266)

Richardson-Allen Corp., 116-15 15th Ave., College Point, L. I., N. Y.
Timers and time switches

Rep—W. Pa., W. Va., Northern Ohio
William E. Wargo Company
211 Yarrow Lane, Pittsburgh 36, Pa.
TUxedo 4-5800, 4-5801

Richardson Co., 2689 Lake St., Melrose Park, Ill
Plastic and rubber products; battery parts

Richardson Co., Lockland, Cincinnati 15, Ohio

Richardson Camera Co., 2526 North Ontario St., Burbank, Calif.
Portable projectors, data recording cameras; animation camera motors; film viewers and readers

Richardson Scale Co., Van Houten Ave., Clifton, N. J.
Automatic weighing machinery

Richco Plastic Co., 4415 Fullerton Ave., Chicago 39, Ill.
Plastic cable clamps

Richfield Coined Products, 722 Broad St., Clifton, N. J.
Bushings; hermetic seals; machining

Richmont, Inc., 922 S. Myrtle Ave., Monrovia, Calif.
Torque instruments and tools

Riehle Testing Machine Division, American Machine & Metals Inc., East Moline, Ill.
Testing machines and testing instruments for tension, compression, bending, torsion, shear, hardness, wear

Riester & Thesmacher Co., 1526 W. 25th St., Cleveland 13, Ohio
Metal Instrument Housings

Riggs Nucleonics Corp., 717 N. Victory Blvd., Burbank, Calif.
Gamma area-monitoring instruments; gamma-beta portable survey meters; specialized instruments with pressurized ionization chambers

Rinco, Inc., 7962 S. E. Powell Blvd., Portland 6, Oregon
Potentiometers; rheostats; resistors; inductance-capacitance bridges; capacitors

Ripley Co., Inc., Factory St., Middletown, Conn.

Ritchie & Co., W. C., 8807 Baltimore Ave., Chicago 17, Ill.
Paper boxes, cartons, fibre cans & tubes; transparent packages

Ritchie & Son, E. S., 112 Cypress St., Brookline 46, Mass.
Marine instruments

Riverbank Laboratories, P. O. Box 65, Geneva, Ill.
Temperature-compensated, tuning-fork controlled frequency standards

Riverside Mfg. & Electrical Supply Co., 10221 Michigan Ave., Dearborn, Michigan
Switches

Rivett Lathe & Grinder, Inc., 18 Riverview Rd., Brighton 35, Mass.
Lathes, grinders; air & hydraulic cylinders and valves; hydraulic power units

Robbins Aviation, Inc., 2350 East 38th St., Los Angeles 58, Calif.
Dehumidifiers: hi-lo flows, hi-lo pressures; valves: leakproof, metering, instrument, shutoff, hi-vacuum to 6000 psig
(See advertisement on pages 76, 218)

Robbins & Myers, Inc., 1345 Lagonda Ave., Springfield 99, Ohio
Frequency converters; fractional hp motors

Robertshaw-Fulton Controls Co., 110 E. Otterman St., Greensburg, Pa.
Temperature controllers and regulators

Robertson & Co., John H., 4153 W. Belmont Ave., Chicago 41, Ill.
Scientific glassware, laboratory apparatus

Robertson & Ruth, Box 534, Elmhurst, Illinois
Dial hole-cutting saw

Robins Industries Corp., 36-27 Prince St., Flushing 54, N. Y.
Magnetic recording tape cutter-splicers

Robinson Aviation Inc., Teterboro Airport, Teterboro, N. J.
Anti-vibration mountings

Robinson Orifice Fitting Co., 2836 Lugo St., Los Angeles 23, Calif.
Orifice fittings, flanges unions, and related equipment
(See advertisement on page 131)

Robinson Orifice Fitting Co. of Texas, Inc., P. O. Box 17216, Houston 31, Texas
Orifice fittings, flanges; unions; and related equipment

Robotron Corp., 21300 W. 8 Mile Rd., Detroit 19, Mich.

Rockbestos Products Corp., 285 Nicoll St., New Haven 4, Conn.
Asbestos wires and cables

Rochester Electronics Co., Inc., P. O. Box 227, Penfield, N. Y.
Decade resistors

Rochester Mfg. Co., Inc., 100 Rockwood St., Rochester 10, N. Y.
Pressure and liquid level indicators and thermometers

Rockford Machine Tool Co., 2500 Kishwaukee St., Rockford, Ill.

Rockwell Co., W. S., 200 Eliot St., Fairfield, Conn.
Butterfly control valves; industrial furnaces and ovens
(See advertisement on page 217)

Pittsburgh Representative
M. S. Jacobs & Associates, Inc.
810 Noblestown Rd., Pittsburgh 5, Pa.
WAlnut 1-6140

Rockwell Engineering Co., 2141 E. 45th St., Indianapolis 5, Ind.
Special instruments to customers specifications

Rockwell Mfg. Co., 400 N. Lexington Ave., Pittsburgh 8, Pa.
Fluid meters; hydraulic pumps; gas distribution systems; timing instrumentation; service cocks, meter and air cocks; liquid meters

Rockwood Sprinkler Co., 38 Harlow St., Worcester 5, Mass.
Air-operated valves; pipe detectors

Rodale Mfg. Co., Inc., Emmaus, Pa.
Electrical wiring devices

Roemer Drug Co., 606 N. Broadway, Milwaukee 2, Wis.
Laboratory supply house

Rogan Brothers, 8025 North Monticello Ave., Skokie, Ill.
Knobs molded from stock molds for all types of instruments; parts molded to manufacturers' specifications
(See advertisement on page 111)

Rogers & Clarke Mfg. Co., 901 River Lane, P. O. Box 93, Loves Park Postal Station, Rockford, Ill.
Optical components for photographic and instrument industries; lens curve-generating equipment

Roller-Smith Corp., 1825 W. Market St., Bethlehem, Pa.
Instruments (indicating and graphic) air and oil circuit breakers, relays, switchboards, precision balances, transformers, instrument and control switches

Representative—SE N. Y., No. N. J., SW Conn.
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COrtlandt 7-5326

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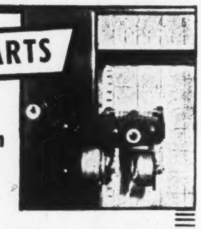

Rome Cable Co., Rome, N. Y.
Wires; conduits; power and control cables

Ronar, Inc., 1316 Sherman Ave., Evanston, Ill.
Electronic stethoscope; polariscopes; electrical and electronic components

Roots-Connersville Blower Co., Div. of Dresser Inds., Inc., 900 W. Mount St., Connersville, Ind.
Positive-displacement fluid meters; pumps; blowers; gas generators

Rose Operating Valve Co., 120 E. Golden Gate Ave., Detroit 3, Mich.
Valves

Rotating Components Inc., 267 Green St., Brooklyn 22, N. Y.
Sub-fractional-hp motors; fans; blowers; servo motors; geared motors; alternators

Rotron Controls Corp., 7-9 Schoomaker Lane, Woodstock, N. Y.
Fractional-hp motors

Royal Master, Inc., Highway 23, Riverdale, N. J.
Centerless grinders; contour template specialists

Royal-McBee Corp., Westchester Ave., Port Chester, N. Y.
Electronic digital computer, keysort duplicating, tabulating, data punches, McBee binding machines

Royco Instruments, Inc., 874 Fabion Way, Palo Alto, Calif.
Temperature Measuring Instruments

New York Representative
M. J. Seavy & Sons
30 Church St., New York 7, N. Y.
Cortlandt 7-8025

Royson Engr. Co., Jacksonville Rd. & Montgomery Ave., Hatboro, Penna.
Chart identification printers; special recorders; electro-mechanical devices
(See advertisement on page 266)

Rubatex Division, Great American Industries, Inc., Bedford, Virginia
Cellular rubber products

Rudolph & Sons, O. C., P. O. Box 446, Caldwell, N. J.
Optical instruments, control instruments

Rueckert Manufacturing Co., 83 King St., East Greenwich, R. I.
Wood and imitation covered cases for tools, instruments and optical goods

Ruge Associates, Inc., Arthur C., 733 Concord Ave., Cambridge 38, Mass.
Resistance thermometer elements

Rupp & Bowman Co., 315 Superior St., Toledo 3, Ohio
Laboratory supplies

Ruska Instrument Corp., 4607 Montrose Blvd., Houston 6, Texas
Geophysical instruments; high pressure viscometers; gas compressibility apparatus

Rust Industrial Company, 130 Silver St., Manchester, N. H.
"Rustrak" miniaturized strip-chart recorder

Rutherford Electronics Co., 8944 Lindblade St., Culver City, Calif.
Precision timers; pulse generators

Ruttco Mfg. Co., 105-20 Metropolitan Ave., Forest Hills, N. Y.
Hydrometers; thermometers

Ryan Recording Thermometer Co., 3851 Poplar Pl., Seattle 44, Wash.
Portable recording thermometers for perishables in transit or storage

Ryan Tool & Engineering Co., 19159 John R. St., Detroit 3, Mich.
Height gages; fixtures; special machinery

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Sackman Co., W. H., Inc., P. O. Box 546 Pottstown, Penna.
Stainless steel, brass, copper, shafts

Sage Electronics Corp., 302 N. Goodman St., Rochester 7, N. Y.
Miniature wire-wound, power resistors

Samarius Electronics, 123 Canal St., Shelton, Conn.
Potentiometer windings to specification, linear and functional

Sampson Chemical & Pigment Corp., 2830 W. Lake St., Chicago 12, Ill.
Phosphorescent and fluorescent coatings

San Fernando Electric Mfg. Co., 1509 First St., San Fernando, Calif.
Hermetically sealed capacitors; rf filters; precision wire-wound single and multi-turn potentiometers

San Jose Scientific Co., San Jose, Calif.
Millivolt recorders

Representative—Texas, Okla., Ark., La.
Arnold Barnes Co.
3603 Lemmon Ave., Dallas 19, Texas LA-6-8735
3913 East 2nd Place, Tulsa 12, Okla. MA-6-7767

Sanborn Co., 175 Wyman St., Waltham 54, Mass.
Oscillographic recording equipment; systems; recorders; preamplifiers; displacement indicators, recorders, pickups; medical instruments

(See advertisement on page 12)

Philadelphia Area Representative
The I. E. Robinson Company
7404 West Chester Pike, Upper Darby, Pa.
SHerwood 8-1294, FLanders 2-7017

Sanders Associates, Inc., 95 Canal St., Nashua, N. H.
Components and systems in electronics, hydraulics and electro-mechanics, radar and missile systems

Sandsteel Spring Div., Sandvik Steel Inc., 1702 Nevins Rd., Fair Lawn, New Jersey
Special springs

(See advertisement on page 180)

Sandy Mfg. Co., 26 Maple Ave., Sellersville, Pa.
Dial faces

Sangamo Electric Company, P.O. Box 359, Springfield, Ill. Capacitor Div., Marion, Ill. Electronic Components Div., 2110 Clear Lake Rd., Springfield, Ill.
Electric meters; instrument transformers; time switches and radio-condensers

Santay Corp., 351 No. Crawford Ave., Chicago 24, Ill.

Sarco Company, Inc., 350 Fifth Ave., New York 1, N. Y.
Temperature and pressure regulators; steam traps; strainers

Sargent & Co., E. H., 4647 Foster Ave., Chicago 30, Ill.
Laboratory supplies and chemicals

Sarkes Tarzian, Inc., Rectifier Div., 415 N. College Ave., Bloomington, Ind.
Selenium rectifiers; silicon rectifiers; semiconductors

Sawyer Bailey Corp., 1559 Niagara St., Buffalo 13, N. Y.
Air compressors

Saxonburg Ceramics, P. O. Box 100, Saxonburg, Pa.
Insulation testers; insulating materials; industrial ceramics

Scaico Controls, Inc., C. C. Pump Mfg. Div., P. O. Box 41, Cooper St., Delanco, Palmyra, N. J.
Temperature alarms; switches

SCAM Instrument Corp., 1811 W. Irving Park Rd. Chicago 13, Ill.
Annunciator and alarm systems

Philadelphia Representative
Arobone and Cline
Wilford Building, 33rd & Arch Streets
Philadelphia 4, Penna. EVergreen 2-6520

Pittsburgh & Buffalo Representative
M. S. Jacobs & Associates, Inc.
810 Noblestown Rd., Pittsburgh 5, Pa. WA-1-6140
1807 Elmwood Ave., Buffalo 7, N. Y. DE-3229

Rep—Lower Wis., No. Ill., No. Ind.
Paul B. Shannon Co.
10336 S. Western Ave., Chicago 43, Ill.
BEverly 3-3392

Schaar & Co., 7300 W. Montrose, Chicago 34, Ill.
Laboratory supplies

Schade Valve Mfg. Co., 2527 N. Bodine St., Philadelphia 33, Pa.
Automatic regulating valves

Schaefer Bros., Co., 1059 W. 11th St., Chicago 7, Ill.
Rheostats

Schaevitz Engineering, Route 130 at Schaevitz Blvd., Camden, N. J.
Accelerometers, extensometers, position indicators, remote metering equipment; differential transformers

Schaffer Poidometer Co., 2828 Smallman St., Pittsburgh 22, Pa.
Scales

Schauer Mfg. Corp., 4500 Alpine Ave., Cincinnati 42, Ohio
Battery chargers; battery eliminators; rectifiers

Scheidl Mfg. Co., 1985 Great Neck Rd., Copiague, L. I., N. Y.

Scherr Co., Inc., George, 200 Lafayette St., New York 12, N. Y.
Optical measuring and inspection equipment

Scherr Optical Tools, Inc., 200 Lafayette St., N. Y. 12, N. Y.
Shop instruments and components

Schlumberger Well Surveying Corp., Box 550, Ridgefield, Conn.
Nuclear magnetic resonance analyzers

Schneider-Cogswell, Inc., 1849 N. Halstead St., Chicago 14, Ill.
Precision lenses and prisms

Schnitzer Alloy Products Co., 537 Pine St., Elizabeth 1, N. J.

Schrader's Son, A., 470 Vanderbilt Ave., Brooklyn 38, N. Y.
Pneumatic cylinders; safety valves; regulating valves; solenoid valves

Schueler & Co., 75 Cliff St., New York 38, N. Y.

Schutte & Koerting Co., 2259 State Rd., Cornwells Heights, Bucks County, Pa.
Heat transfer equipment; vacuum pumps; rotameters and flow indicators; tubes; valves; spray nozzles; atomizers; gear pumps, desuperheaters

(See advertisement on page 92)

Schutte Optical Co., Inc., 16 Dowling Place, Rochester 5, N. Y.
Optical instruments and components

Schuttig & Co., 5005 Calvert Rd., College Park, Md.
Radio and wired remote-control equipment

Schweitzer Mfg. Co., Inc., E. O., 1002 Dundee Rd., Northbrook, Ill.
Electrical instruments

Sciaky Bros., Inc., 4915 W. 67th St., Chicago 38, Ill.
Welding equipment including control systems

Scientific Apparatus Co., 4 Landscape Ave., Yonkers 5, N. Y.
Laboratory apparatus

Scientific Balance and Instrument Service, 2650 S. W Temple, Salt Lake City 15, Utah
High precision laboratory analytical balances

Scientific Equipment Co., 3527 Lancaster Ave., Philadelphia 4, Pa.
Laboratory apparatus

Scientific Glass Apparatus Co., Inc., 100 Lakewood Terrace, Bloomfield, N. J.
Glass apparatus and interchangeable ground glass joints; spectrophotometers; pH meters; ovens

Scientific Industries, Inc., 15 Park St., Springfield 3, Mass.
Time delay switches; electrical timers

Scientific Instrument Co., 1041 Second St., Detroit 26, Mich.
Industrial & laboratory thermometers; hydrometers; special laboratory apparatus

Scientific Instrument Development Labs., 204 W Court St. Paris, Illinois
Industrial and scientific instruments

Scientific Wood Cabinet Co., 80-86 Holmes St. Belleville 9, N. J.
Wooden cases, cabinets, and chests

Scope Instrument Corp., Scope Building, Mamaroneck, N. Y.

Scott, Inc., Hermon Hosmer, 385 Putnam Ave., Cambridge 39, Mass.
Electronic equipment for measurement, analysis and reproduction of sound, noise and vibration, including meters, analyzers; amplifiers, radio tuners and turntables

Scott Testers, Inc., 166 Blackstone St., Box 963, Providence, R. I.
Testing machines

Scovill Mfg. Co., P. O. Box 1820, Waterbury 20, Conn.
Tube fittings

Scrayco Manufacturing Co., 201 Green Ave., Middlesex, N. J.
Level controls for bin and bulk materials

Scruggs Co., Loyd, P. O. Drawer 232, Festus, Missouri
Shaded pole, universal, precision, geared and capacitor-type motors

Scully-Jones and Co., 1901 S. Rockwell St., Chicago 8, Ill.
Indicating flow meters; pressure gages; thermometers

Sealectric Switch & Relay Corp., 6025 N. Keystone Ave., Chicago 46, Ill.
Snap acting switches; relays, connectors, contacts

Sealol Corp., Providence 5, R. I.
Dial indicators; mechanical seals

Seals, Ltd., 1010 Mission St., South Pasadena, Calif.
Glass insulated electrical connectors

Sealtron Corp., Reading Rd., at Amity, Box 72, Cincinnati 15, Ohio
Glass-to-metal hermetic seals

Seamlex Co., Inc., 41-33 24th St., Long Island City 1, N. Y.

Seco Mfg. Co., 5015 Penn Ave., South, Minneapolis 19, Minn.
Electronic test equipment

Secon Metals Corp., 7 Intervale St., White Plains, N. Y.
Wire, alloys

Security Controls, Inc., 503 Franklin St., Buffalo 2, N. Y.
Machine safety and control equipment

Security Valve Corp., 541 W. Garfield Ave., Glendale 4, Calif.
Valves for high, low or differential pressure, electric or automatic shut-off; for chemical, oil or gas per API and ASME specs

(See advertisement on page 212)

Seedburo Equipment Co., 618 W. Jackson Blvd., Chicago 6, Ill.
Moisture-testers; ovens; scales; thermometers

Seederer-Kohlbusch, Inc., 25 S. Van Brunt St., Englewood, N. J.
Analytical balances and weights; spring dynamometers

Seegers Manufacturing Co., 515 W. Main St., Barrington, Ill.
Gauge components; temperature and humidity instruments; synchro-output pressure pickups

(See advertisement on page 148)

Seely Instrument Co., 377 Fourth St., Niagara Falls, N. Y.
Interval timers; temperature and pressure pilots

Seismograph Service Corp., P.O. Box 1590, Tulsa 1, Okla.
Worldwide geophysical consulting service; specialized prospecting equipment; continuous velocity logging; lorac service; custom electronics manufacture

Selas Corp. of America, Dresher, Pa.
Furnaces; ovens; brazing machinery; micro-filtration equipment; separators; flow rate indicators

Sell Electric Co., H. H., 3240 Dakota Ave., Minneapolis 16, Minn.
Phase sequence indicators

Sel-Rex Corp., 155 Manchester Place, Newark 4, N. J.
Precious metals processes; metallic power rectifiers; airborne power equipment; liquid clarification filters

Semi-Elements Inc., Saxonburg Blvd., Saxonburg, Pa.
Receiving antennas, accessories; photodiodes; open lead-in wire

Semimetals, Inc., 15 E. 48th St., New York 17, N. Y.
Silicon crystal growing and refining equipment; single-crystal germanium, N-type or P-type for diode and transistor applications

Semon Bache & Co., (See Bache)

Sendur Inc., 4878 W. Grand Ave., Chicago 39, Ill.
Electrical instruments

Sensitive Research Instrument Corp., 310 Main St., New Rochelle, N. Y.
Electrical instruments measuring quantities or values of small current or voltage

Philadelphia Area Representative
The I. E. Robinson Company
7404 West Chester Pike, Upper Darby, Pa.
SHerwood 8-1294, FLanders 2-7017

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NEWTON HIGHLANDS 61, MASS.

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Rhodes Inc., M. H., 30 Bartholomew Ave., Hartford 6, Conn.
Mechanical Interval time switches; bell signal timers

Rhodes & Co., James H., 157 W. Hubbard St., Chicago 10, Ill.

Richards Co., Inc., Arklay S., 52 Winchester St., Newton Highland 61, Mass.
Thermocouples, lead wire and protection tubes
(See advertisement on page 266)

Richardson-Allen Corp., 116-15 15th Ave., College Point, L. I., N. Y.
Timers and time switches

> **Rep—W. Pa., W. Va., Northern Ohio**
> **William E. Wargo Company**
> 211 Yarrow Lane, Pittsburgh 36, Pa.
> TUxedo 4-5800, 4-5801

Richardson Co., 2689 Lake St., Melrose Park, Ill
Plastic and rubber products; battery parts

Richardson Co., Lockland, Cincinnati 15, Ohio

Richardson Camera Co., 2526 North Ontario St., Burbank, Calif.
Portable projectors, data recording cameras; animation camera motors; film viewers and readers

Richardson Scale Co., Van Houten Ave., Clifton, N. J.
Automatic weighing machinery

Richco Plastic Co., 4415 Fullerton Ave., Chicago 39, Ill.
Plastic cable clamps

Richfield Coined Products, 722 Broad St., Clifton, N. J.
Bushings; hermetic seals; machining

Richmont, Inc., 922 S. Myrtle Ave., Monrovia, Calif.
Torque instruments and tools

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Scientific glassware, laboratory apparatus

Robertson & Ruth, Box 534, Elmhurst, Illinois
Dial hole-cutting saw

Robins Industries Corp., 36-27 Prince St., Flushing 54, N. Y.
Magnetic recording tape cutter splicers

Robinson Aviation Inc., Teterboro Airport, Teterboro N. J.
Anti-vibration mountings

Robinson Orifice Fitting Co., 2836 Lugo St., Los Angeles 23, Calif.
Orifice fittings, flanges, unions, and related equipment
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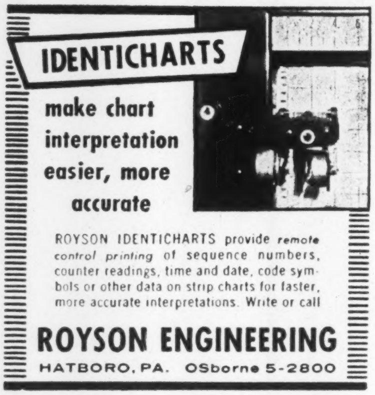

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San Jose Scientific Co., San Jose, Calif.
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Arnold Barnes Co.
3603 Lemmon Ave., Dallas 19, Texas LA-6-8735
3913 East 2nd Place, Tulsa 12, Okla. MA-6-7707

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Sanders Associates, Inc., 95 Canal St., Nashua, N. H.
Components and systems in electronics, hydraulics and electro-mechanics, radar and missile systems

Sandsteel Spring Div., Sandvik Steel Inc., 1702 Nevins Rd., Fair Lawn, New Jersey
Special springs

(See advertisement on page 180)

Sandy Mfg. Co., 26 Maple Ave., Sellersville, Pa.
Dial faces

Sangamo Electric Company, P.O. Box 359, Springfield, Ill. Capacitor Div., Marion, Ill. Electronic Components Div., 2110 Clear Lake Rd., Springfield, Ill.
Electric meters; instrument transformers; time switches and radio-condensers

Santay Corp., 351 No. Crawford Ave., Chicago 24, Ill.

Sarco Company, Inc., 350 Fifth Ave., New York 1, N. Y.
Temperature and pressure regulators; steam traps; strainers

Sargent & Co., E. H., 4647 Foster Ave., Chicago 30, Ill.
Laboratory supplies and chemicals

Sarkes Tarzian, Inc., Rectifier Div., 415 N. College Ave., Bloomington, Ind.
Selenium rectifiers; silicon rectifiers; semiconductors

Sawyer Bailey Corp., 1559 Niagara St., Buffalo 13, N. Y.
Air compressors

Saxonburg Ceramics, P. O. Box 100, Saxonburg, Pa.
Insulation testers; insulating materials; industrial ceramics

Scaico Controls, Inc., C. C. Pump Mfg. Div., P. O. Box 41, Cooper St., Delanco, Palmyra, N. J.
Temperature alarms; switches

SCAM Instrument Corp., 1811 W. Irving Park Rd. Chicago 13, Ill.
Annunciator and alarm systems

Philadelphia Representative
Arobone and Cline
Wilford Building, 33rd & Arch Streets
Philadelphia 4, Penna. EVergreen 2-6520

Pittsburgh & Buffalo Representative
M. S. Jacobs & Associates, Inc.
810 Noblestown Rd., Pittsburgh 5, Pa. WA-1-6140
1807 Elmwood Ave., Buffalo 7, N. Y. DE-3229

Rep—Lower Wis., No. Ill., No. Ind.
Paul B. Shannon Co.
10336 S. Western Ave., Chicago 43, Ill.
BEverly 3-3392

Schaar & Co., 7300 W. Montrose, Chicago 34, Ill.
Laboratory supplies

Schade Valve Mfg. Co., 2527 N. Bodine St., Philadelphia 33, Pa.
Automatic regulating valves

Schaefer Bros., Co., 1059 W. 11th St., Chicago 7, Ill.
Rheostats

Schaevitz Engineering, Route 130 at Schaevitz Blvd., Camden, N. J.
Accelerometers, extensometers, position indicators, remote metering equipment; differential transformers

Schaffer Poidometer Co., 2828 Smallman St., Pittsburgh 22, Pa.
Scales

Schauer Mfg. Corp., 4500 Alpine Ave., Cincinnati 42, Ohio
Battery chargers; battery eliminators; rectifiers

Scheidl Mfg. Co., 1985 Great Neck Rd., Copiague, L. I., N. Y.

Scherr Co., Inc., George, 200 Lafayette St., New York 12, N. Y.
Optical measuring and inspection equipment

Scherr Optical Tools, Inc., 200 Lafayette St., N. Y. 12, N. Y.
Shop instruments and components

Schlumberger Well Surveying Corp., Box 550, Ridgefield, Conn.
Nuclear magnetic resonance analyzers

Schneider-Cogswell, Inc., 1849 N. Halstead St., Chicago 14, Ill.
Precision lenses and prisms

Schnitzer Alloy Products Co., 537 Pine St., Elizabeth 1, N. J.

Schrader's Son, A., 470 Vanderbilt Ave., Brooklyn 38, N. Y.
Pneumatic cylinders; safety valves; regulating valves; solenoid valves

Schueler & Co., 75 Cliff St., New York 38, N. Y.

Schutte & Koerting Co., 2259 State Rd., Cornwells Heights, Bucks County, Pa.
Heat transfer equipment; vacuum pumps; rotameters and flow indicators; tubes; valves; spray nozzles; atomizers, gear pumps, desuperheaters

(See advertisement on page 92)

Schutte Optical Co., Inc., 16 Dowling Place, Rochester 5, N. Y.
Optical instruments and components

Schuttig & Co., 5005 Calvert Rd., College Park, Md.
Radio and wired remote-control equipment

Schweitzer Mfg. Co., Inc., E. O., 1002 Dundee Rd., Northbrook, Ill.
Electrical instruments

Sciaky Bros., Inc., 4915 W. 67th St., Chicago 38, Ill.
Welding equipment including control systems

Scientific Apparatus Co., 4 Landscape Ave., Yonkers 5, N. Y.
Laboratory apparatus

Scientific Balance and Instrument Service, 2650 S. W. Temple, Salt Lake City 15, Utah
High precision laboratory analytical balances

Scientific Equipment Co., 3527 Lancaster Ave., Philadelphia 4, Pa.
Laboratory apparatus

Scientific Glass Apparatus Co., Inc., 100 Lakewood Terrace, Bloomfield, N. J.
Glass apparatus and interchangeable ground glass joints; spectrophotometers; pH meters; ovens

Scientific Industries, Inc., 15 Park St., Springfield 3, Mass.
Time delay switches; electrical timers

Scientific Instrument Co., 1041 Second St., Detroit 26, Mich.
Industrial & laboratory thermometers; hydrometers; special laboratory apparatus

Scientific Instrument Development Labs., 204 W. Court St. Paris, Illinois
Industrial and scientific instruments

Scientific Wood Cabinet Co., 80-86 Holmes St., Belleville 9, N. J.
Wooden cases, cabinets, and chests

Scope Instrument Corp., Scope Building, Mamaroneck, N. Y.

Scott, Inc., Hermon Hosmer, 385 Putnam Ave., Cambridge 39, Mass.
Electronic equipment for measurement, analysis and reproduction of sound, noise and vibration, including meters, analyzers; amplifiers, radio tuners and turntables

Scott Testers, Inc., 166 Blackstone St., Box 963, Providence, R. I.
Testing machines

Scovill Mfg. Co., P. O. Box 1820, Waterbury 20, Conn.
Tube fittings

Scrayco Manufacturing Co., 201 Green Ave., Middlesex, N. J.
Level controls for bin and bulk materials

Scruggs Co., Loyd, P. O. Drawer 232, Festus, Missouri
Shaded pole, universal, precision, geared and capacitor-type motors

Scully-Jones and Co., 1901 S. Rockwell St., Chicago 8, Ill.
Indicating flow meters; pressure gages; thermometers

Sealectric Switch & Relay Corp., 6025 N. Keystone Ave., Chicago 46, Ill.
Snap acting switches; relays, connectors, contacts

Sealol Corp., Providence 5, R. I.
Dial indicators; mechanical seals

Seals, Ltd., 1010 Mission St., South Pasadena, Calif.
Glass insulated electrical connectors

Sealtron Corp., Reading Rd., at Amity, Box 72, Cincinnati 15, Ohio
Glass-to-metal hermetic seals

Seamlex Co., Inc., 41-33 24th St., Long Island City 1, N. Y.

Seco Mfg. Co., 5015 Penn Ave., South, Minneapolis 19, Minn.
Electronic test equipment

Secon Metals Corp., 7 Intervale St., White Plains, N. Y.
Wire, alloys

Security Controls, Inc., 503 Franklin St., Buffalo 2, N. Y.
Machine safety and control equipment

Security Valve Corp., 541 W. Garfield Ave., Glendale 4, Calif.
Valves for high, low or differential pressure, electric or automatic shut-off; for chemical, oil or gas per API and ASME specs

(See advertisement on page 212)

Seedburo Equipment Co., 618 W. Jackson Blvd., Chicago 6, Ill.
Moisture-testers; ovens; scales; thermometers

Seederer-Kohlbusch, Inc., 25 S. Van Brunt St., Englewood, N. J.
Analytical balances and weights; spring dynamometers

Seegers Manufacturing Co., 515 W. Main St., Barrington, Ill.
Gauge components; temperature and humidity instruments; synchro-output pressure pickups

(See advertisement on page 148)

Seely Instrument Co., 377 Fourth St., Niagara Falls, N. Y.
Interval timers; temperature and pressure pilots

Seismograph Service Corp., P.O. Box 1590, Tulsa 1, Okla.
Worldwide geophysical consulting service; specialized prospecting equipment; continuous velocity logging; lorac service; custom electronics manufacture

Selas Corp. of America, Dresher, Pa.
Furnaces; ovens; brazing machinery; micro-filtration equipment; separators; flow rate indicators

Sell Electric Co., H. H., 3240 Dakota Ave., Minneapolis 16, Minn.
Phase sequence indicators

Sel-Rex Corp., 155 Manchester Place, Newark 4, N. J.
Precious metals processes; metallic power rectifiers; airborne power equipment; liquid clarification filters

Semi-Elements Inc., Saxonburg Blvd., Saxonburg, Pa.
Receiving antennas, accessories; photodiodes; open lead-in wire

Semimetals, Inc., 15 E. 48th St., New York 17, N. Y.
Silicon crystal growing and refining equipment; single-crystal germanium, N-type or P-type for diode and transistor applications

Semon Bache & Co., (See Bache)

Sendur Inc., 4878 W. Grand Ave., Chicago 39, Ill.
Electrical instruments

Sensitive Research Instrument Corp., 310 Main St., New Rochelle, N. Y.
Electrical instruments measuring quantities or values of small current or voltage

Philadelphia Area Representative
The I. E. Robinson Company
7404 West Chester Pike, Upper Darby, Pa.
SHerwood 8-1294, FLanders 2-7017

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NEWTON HIGHLANDS 61, MASS.

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Mechanical interval time switches; bell signal timers

Rhodes & Co., James H., 157 W. Hubbard St., Chicago 10, Ill.

Richards Co., Inc., Arklay S., 52 Winchester St., Newton Highland 61, Mass.
Thermocouples, lead wire and protection tubes
(See advertisement on page 266)

Richardson-Allen Corp., 116-15 15th Ave., College Point, L. I., N. Y.
Timers and time switches

Rep—W. Pa., W. Va., Northern Ohio
William E. Wargo Company
211 Yarrow Lane, Pittsburgh 36, Pa.
TUxedo 4-5800, 4-5801

Richardson Co., 2689 Lake St., Melrose Park, Ill
Plastic and rubber products; battery parts

Richardson Co., Lockland, Cincinnati 15, Ohio

Richardson Camera Co., 2526 North Ontario St., Burbank, Calif.
Portable projectors, data recording cameras; animation camera motors; film viewers and readers

Richardson Scale Co., Van Houten Ave., Clifton, N. J.
Automatic weighing machinery

Richco Plastic Co., 4445 Fullerton Ave., Chicago 39, Ill.
Plastic cable clamps

Richfield Coined Products, 722 Broad St., Clifton, N. J.
Bushings; hermetic seals; machining

Richmont, Inc., 922 S. Myrtle Ave., Monrovia, Calif.
Torque instruments and tools

Riehle Testing Machine Division, American Machine & Metals Inc., East Moline, Ill.
Testing machines and testing instruments for tension, compression, bending, torsion, shear, hardness, wear

Riester & Thesmacher Co., 1526 W. 25th St., Cleveland 13, Ohio
Metal Instrument Housings

Riggs Nucleonics Corp., 717 N. Victory Blvd., Burbank, Calif.
Gamma area-monitoring instruments; gamma-beta portable survey meters; specialized instruments with pressurized ionization chambers

Rinco, Inc., 7962 S. E. Powell Blvd., Portland 6, Oregon
Potentiometers; rheostats; resistors; inductance-capacitance bridges; capacitors

Ripley Co., Inc., Factory St., Middletown, Conn.

Ritchie & Co., W. C., 8807 Baltimore Ave., Chicago 17, Ill.
Paper boxes, cartons, fibre cans & tubes; transparent packages

Ritchie & Son, E. S., 112 Cypress St., Brookline 46, Mass.
Marine instruments

Riverbank Laboratories, P. O. Box 65, Geneva, Ill.
Temperature-compensated, tuning-fork controlled frequency standards

Riverside Mfg. & Electrical Supply Co., 10221 Michigan Ave., Dearborn, Michigan
Switches

Rivett Lathe & Grinder, Inc., 18 Riverview Rd., Brighton 35, Mass.
Lathes, grinders; air & hydraulic cylinders and valves; hydraulic power units

Robbins Aviation, Inc., 2350 East 38th St., Los Angeles 58, Calif.
Dehumidifiers: hi-lo flows, hi-lo pressures; valves: leakproof, metering, instrument, shutoff, hi-vacuum to 6000 psig
(See advertisement on pages 76, 218)

Robbins & Myers, Inc., 1345 Lagonda Ave., Springfield 99, Ohio
Frequency converters; fractional-hp motors

Robertshaw-Fulton Controls Co., 110 E. Otterman St., Greensburg, Pa.
Temperature controllers and regulators

Robertson & Co., John H., 4153 W. Belmont Ave., Chicago 41, Ill.
Scientific glassware, laboratory apparatus

Robertson & Ruth, Box 534, Elmhurst, Illinois
Dial hole-cutting saw

Robins Industries Corp., 36-27 Prince St., Flushing 54, N. Y.
Magnetic recording tape cutter splicers

Robinson Aviation Inc., Teterboro Airport, Teterboro N. J.
Anti-vibration mountings

Robinson Orifice Fitting Co., 2830 Lugo St., Los Angeles 23, Calif.
Orifice fittings, flanges, unions, and related equipment
(See advertisement on page 131)

Robinson Orifice Fitting Co. of Texas, Inc., P. O. Box 17216, Houston 31, Texas
Orifice fittings, flanges; unions; and related equipment

Robotron Corp., 21300 W. 8 Mile Rd., Detroit 19, Mich.

Rockbestos Products Corp., 285 Nicoll St., New Haven 4, Conn.
Asbestos; wires and cables

Rochester Electronics Co., Inc., P. O. Box 227, Penfield, N. Y.
Decade resistors

Rochester Mfg. Co., Inc., 100 Rockwood St., Rochester 10, N. Y.
Pressure and liquid level indicators and thermometers

Rockford Machine Tool Co., 2500 Kishwaukee St., Rockford, Ill.

Rockwell Co., W. S., 200 Eliot St., Fairfield, Conn.
Butterfly control valves; industrial furnaces and ovens
(See advertisement on page 217)

Pittsburgh Representative
M. S. Jacobs & Associates, Inc.
810 Noblestown Rd., Pittsburgh 5, Pa.
WAlnut 1-6140

Rockwell Engineering Co., 2141 E. 45th St., Indianapolis 5, Ind.
Special instruments to customers specifications

Rockwell Mfg. Co., 400 N. Lexington Ave., Pittsburgh 8, Pa.
Fluid meters; hydraulic pumps; gas distribution systems; timing instrumentation; service cocks, meter and air cocks; liquid meters

Rockwood Sprinkler Co., 38 Harlow St., Worcester 5, Mass.
Air-operated valves; pipe detectors

Rodale Mfg. Co., Inc., Emmaus, Pa.
Electrical wiring devices

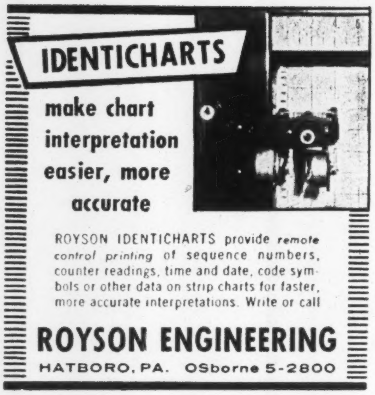
Roemer Drug Co., 606 N. Broadway, Milwaukee 2, Wis.
Laboratory supply house

Rogan Brothers, 8025 North Monticello Ave., Skokie, Ill.
Knobs molded from stock molds for all types of instruments; parts molded to manufacturers' specifications
(See advertisement on page 111)

Rogers & Clarke Mfg. Co., 901 River Lane, P. O. Box 93, Loves Park Postal Station, Rockford, Ill.
Optical components for photographic and instrument industries; lens curve-generating equipment

Roller-Smith Corp., 1825 W. Market St., Bethlehem, Pa.
Instruments (indicating and graphic) air and oil circuit breakers, relays, switchboards, precision balances, transformers, instrument and control switches

Representative—SE N. Y., No. N. J., SW Conn.
Kahant Associates
11 Park Place, New York 7, N. Y.
COrtlandt 7-5326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HATBORO, PA. OSborne 5-2800

For more information circle **390** on inquiry card.

Rome Cable Co., Rome, N. Y.
Wires; conduits; power and control cables

Ronar, Inc., 1316 Sherman Ave., Evanston, Ill.
Electronic stethoscope; polariscopes; electrical and electronic components

Roots-Connersville Blower Co., Div. of Dresser Inds., Inc., 900 W. Mount St., Connersville, Ind.
Positive-displacement fluid meters; pumps; blowers; gas generators

Rose Operating Valve Co., 120 E. Golden Gate Ave., Detroit 3, Mich.
Valves

Rotating Components Inc., 267 Green St., Brooklyn 22, N. Y.
Sub-fractional-hp motors; fans; blowers; servo motors; geared motors; alternators

Rotron Controls Corp., 7-9 Schoomaker Lane, Woodstock, N. Y.
Fractional-hp motors

Royal Master, Inc., Highway 23, Riverdale, N. J.
Centerless grinders; contour template specialists

Royal McBee Corp., Westchester Ave., Port Chester, N. Y.
Electronic digital computer, keysort duplicating, tabulating, data punches, McBee binding machines

Royco Instruments, Inc., 874 Fabion Way, Palo Alto, Calif.
Temperature Measuring Instruments

New York Representative
M. J. Seavy & Sons
30 Church St., New York 7, N. Y.
Cortlandt 7-8025

Royson Engr. Co., Jacksonville Rd. & Montgomery Ave., Hatboro, Penna.
Chart identification printers; special recorders; electro-mechanical devices
(See advertisement on page 266)

Rubatex Division, Great American Industries, Inc., Bedford, Virginia
Cellular rubber products

Rudolph & Sons, O. C., P. O. Box 446, Caldwell, N. J.
Optical instruments, control instruments

Rueckert Manufacturing Co., 83 King St., East Greenwich, R. I.
Wood and imitation covered cases for tools, instruments and optical goods

Ruge Associates, Inc., Arthur C., 733 Concord Ave., Cambridge 38, Mass.
Resistance thermometer elements

Rupp & Bowman Co., 315 Superior St., Toledo 3, Ohio
Laboratory supplies

Ruska Instrument Corp., 4607 Montrose Blvd., Houston 6, Texas
Geophysical instruments; high pressure viscometers; gas compressibility apparatus

Rust Industrial Company, 130 Silver St., Manchester, N. H.
"Rustrak" miniaturized strip-chart recorder

Rutherford Electronics Co., 8944 Lindblade St., Culver City, Calif.
Precision timers; pulse generators

Ruttco Mfg. Co., 105-20 Metropolitan Ave., Forest Hills, N. Y.
Hydrometers; thermometers

Ryan Recording Thermometer Co., 851 Poplar Pl., Seattle 44, Wash.
Portable recording thermometers for perishables in transit or storage

Ryan Tool & Engineering Co., 19159 John R. St., Detroit 3, Mich.
Height gages; fixtures; special machinery

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Sackman Co., W. H., Inc., P. O. Box 546 Pottstown, Penna.
Stainless steel, brass, copper, shafts

Sage Electronics Corp., 302 N. Goodman St., Rochester 7, N. Y.
Miniature wire-wound, power resistors

Samarius Electronics, 123 Canal St., Shelton, Conn.
Potentiometer windings to specification, linear and functional

Sampson Chemical & Pigment Corp., 2830 W. Lake St., Chicago 12, Ill.
Phosphorescent and fluorescent coatings

San Fernando Electric Mfg. Co., 1509 First St., San Fernando, Calif.
Hermetically sealed capacitors; rf filters; precision wire-wound single and multi turn potentiometers

San Jose Scientific Co., San Jose, Calif.
Millivolt recorders

Representative—Texas, Okla., Ark., La.
Arnold Barnes Co.
3603 Lemmon Ave., Dallas 19, Texas LA-6-8735
3913 East 2nd Place, Tulsa 12, Okla. MA-6-7707

Sanborn Co., 175 Wyman St., Waltham 54, Mass.
Oscillographic recording equipment: systems, recorders, preamplifiers; displacement indicators, recorders, pickups; medical instruments

(See advertisement on page 12)

Philadelphia Area Representative
The I. E. Robinson Company
7404 West Chester Pike, Upper Darby, Pa.
SHerwood 8-1294, FLanders 2-7017

Sanders Associates, Inc., 95 Canal St., Nashua, N. H.
Components and systems in electronics, hydraulics and electro-mechanics, radar and missile systems

Sandsteel Spring Div., Sandvik Steel Inc., 1702 Nevins Rd., Fair Lawn, New Jersey
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Electric meters; instrument transformers; time switches and radio-condensers

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Selenium rectifiers; silicon rectifiers; semiconductors

Sawyer Bailey Corp., 1559 Niagara St., Buffalo 13, N. Y.
Air compressors

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Rheostats

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Scales

Schauer Mfg. Corp., 4500 Alpine Ave., Cincinnati 42, Ohio
Battery chargers; battery eliminators; rectifiers

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Wooden cases, cabinets, and chests

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Rhodes Inc., M. H., 30 Bartholomew Ave., Hartford 6, Conn.
Mechanical interval time switches; bell signal timers

Rhodes & Co., James H., 157 W. Hubbard St., Chicago 10, Ill.

Richards Co., Inc., Arklay S., 52 Winchester St., Newton Highland 61, Mass.
Thermocouples, lead wire and protection tubes
(See advertisement on page 266)

Richardson-Allen Corp., 116-15 15th Ave., College Point, L. I., N. Y.
Timers and time switches

Rep—W. Pa., W. Va., Northern Ohio
William E. Wargo Company
211 Yarrow Lane, Pittsburgh 36, Pa.
TUxedo 4-5800, 4-5801

Richardson Co., 2689 Lake St., Melrose Park, Ill
Plastic and rubber products; battery parts

Richardson Co., Lockland, Cincinnati 15, Ohio

Richardson Camera Co., 2526 North Ontario St., Burbank, Calif.
Portable projectors, data recording cameras; animation camera motors; film viewers and readers

Richardson Scale Co., Van Houten Ave., Clifton, N. J.
Automatic weighing machinery

Richco Plastic Co., 4415 Fullerton Ave., Chicago 39, Ill.
Plastic cable clamps

Richfield Coined Products, 722 Broad St., Clifton, N. J.
Bushings; hermetic seals; machining

Richmont, Inc., 922 S. Myrtle Ave., Monrovia, Calif.
Torque instruments and tools

Riehle Testing Machine Division, American Machine & Metals Inc., East Moline, Ill.
Testing machines and testing instruments for tension, compression, bending, torsion, shear, hardness, wear

Riester & Thesmacher Co., 1526 W. 25th St., Cleveland 13, Ohio
Metal Instrument Housings

Riggs Nucleonics Corp., 717 N. Victory Blvd., Burbank, Calif.
Gamma area-monitoring instruments; gamma-beta portable survey meters; specialized instruments with pressurized ionization chambers

Rinco, Inc., 7962 S. E. Powell Blvd., Portland 6, Oregon
Potentiometers; rheostats; resistors; inductance-capacitance bridges; capacitors

Ripley Co., Inc., Factory St., Middletown, Conn.

Ritchie & Co., W. C., 8807 Baltimore Ave., Chicago 17, Ill.
Paper boxes, cartons, fibre cans & tubes; transparent packages

Ritchie & Son, E. S., 112 Cypress St., Brookline 46, Mass.
Marine instruments

Riverbank Laboratories, P. O. Box 65, Geneva, Ill.
Temperature-compensated, tuning-fork controlled frequency standards

Riverside Mfg. & Electrical Supply Co., 10221 Michigan Ave., Dearborn, Michigan
Switches

Rivett Lathe & Grinder, Inc., 18 Riverview Rd., Brighton 35, Mass.
Lathes, grinders; air & hydraulic cylinders and valves; hydraulic power units

Robbins Aviation, Inc., 2350 East 38th St., Los Angeles 58, Calif.
Dehumidifiers: hi-lo flows, hi-lo pressures; valves: leakproof, metering, instrument, shutoff, hi-vacuum to 6000 psig
(See advertisement on pages 76, 218)

Robbins & Myers, Inc., 1345 Lagonda Ave., Springfield 99, Ohio
Frequency converters; fractional hp motors

Robertshaw-Fulton Controls Co., 110 E. Otterman St., Greensburg, Pa.
Temperature controllers and regulators

Robertson & Co., John H., 4153 W. Belmont Ave., Chicago 41, Ill.
Scientific glassware, laboratory apparatus

Robertson & Ruth, Box 534, Elmhurst, Illinois
Dial hole-cutting saw

Robins Industries Corp., 36-27 Prince St., Flushing 54, N. Y.
Magnetic recording tape cutter splicers

Robinson Aviation Inc., Teterboro Airport, Teterboro N. J.
Anti-vibration mountings

Robinson Orifice Fitting Co., 2836 Lugo St., Los Angeles 23, Calif.
Orifice fittings, flanges, unions, and related equipment
(See advertisement on page 131)

Robinson Orifice Fitting Co. of Texas, Inc., P. O. Box 17216, Houston 31, Texas
Orifice fittings, flanges; unions; and related equipment

Robotron Corp., 21300 W. 8 Mile Rd., Detroit 19, Mich.

Rockbestos Products Corp., 285 Nicoll St., New Haven 4, Conn.
Asbestos wires and cables

Rochester Electronics Co., Inc., P. O. Box 227, Penfield, N. Y.
Decade resistors

Rochester Mfg. Co., Inc., 100 Rockwood St., Rochester 10, N. Y.
Pressure and liquid level indicators and thermometers

Rockford Machine Tool Co., 2500 Kishwaukee St., Rockford, Ill.

Rockwell Co., W. S., 200 Eliot St., Fairfield, Conn.
Butterfly control valves; industrial furnaces and ovens
(See advertisement on page 217)

Pittsburgh Representative
M. S. Jacobs & Associates, Inc.
810 Noblestown Rd., Pittsburgh 5, Pa.
WAlnut 1-6140

Rockwell Engineering Co., 2141 E. 45th St., Indianapolis 5, Ind.
Special instruments to customers specifications

Rockwell Mfg. Co., 400 N. Lexington Ave., Pittsburgh 8, Pa.
Fluid meters; hydraulic pumps; gas distribution systems; timing instrumentation; service cocks, meter and air cocks; liquid meters

Rockwood Sprinkler Co., 38 Harlow St., Worcester 5, Mass.
Air-operated valves; pipe detectors

Rodale Mfg. Co., Inc., Emmaus, Pa.
Electrical wiring devices

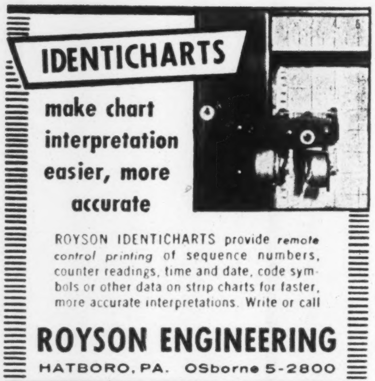
Roemer Drug Co., 606 N. Broadway, Milwaukee 2, Wis.
Laboratory supply house

Rogan Brothers, 8025 North Monticello Ave., Skokie, Ill.
Knobs molded from stock molds for all types of instruments; parts molded to manufacturers' specifications
(See advertisement on page 111)

Rogers & Clarke Mfg. Co., 901 River Lane, P. O. Box 93, Loves Park Postal Station, Rockford, Ill.
Optical components for photographic and instrument industries; lens curve-generating equipment

Roller-Smith Corp., 1825 W. Market St., Bethlehem, Pa.
Instruments (indicating and graphic) air and oil circuit breakers, relays, switchboards, precision balances, transformers, instrument and control switches

Representative—SE N. Y., No. N. J., SW Conn.
Kahant Associates
11 Park Place, New York 7, N. Y.
COrtlandt 7-5326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Rome Cable Co., Rome, N. Y.
Wires; conduits; power and control cables

Ronar, Inc., 1316 Sherman Ave., Evanston, Ill.
Electronic stethoscope; polariscopes; electrical and electronic components

Roots-Connersville Blower Co., Div. of Dresser Inds., Inc., 900 W. Mount St., Connersville, Ind.
Positive-displacement fluid meters; pumps; blowers; gas generators

Rose Operating Valve Co., 120 E. Golden Gate Ave., Detroit 3, Mich.
Valves

Rotating Components Inc., 267 Green St., Brooklyn 22, N. Y.
Sub-fractional-hp motors; fans; blowers; servo motors; geared motors; alternators

Rotron Controls Corp., 7-9 Schoomaker Lane, Woodstock, N. Y.
Fractional-hp motors

Royal Master, Inc., Highway 23, Riverdale, N. J.
Centerless grinders; contour template specialists

Royal McBee Corp., Westchester Ave., Port Chester, N. Y.
Electronic digital computer, keysort duplicating, tabulating, data punches, McBee binding machines

Royco Instruments, Inc., 874 Fabion Way, Palo Alto, Calif.
Temperature Measuring Instruments

New York Representative
M. J. Seavy & Sons
30 Church St., New York 7, N. Y.
Cortlandt 7-8025

Royson Engr. Co., Jacksonville Rd. & Montgomery Ave., Hatboro, Penna.
Chart identification printers; special recorders; electro-mechanical devices
(See advertisement on page 266)

Rubatex Division, Great American Industries, Inc., Bedford, Virginia
Cellular rubber products

Rudolph & Sons, O. C., P. O. Box 446, Caldwell, N. J.
Optical instruments, control instruments

Rueckert Manufacturing Co., 83 King St., East Greenwich, R. I.
Wood and imitation covered cases for tools, instruments and optical goods

Ruge Associates, Inc., Arthur C., 733 Concord Ave., Cambridge 38, Mass.
Resistance thermometer elements

Rupp & Bowman Co., 315 Superior St., Toledo 3, Ohio
Laboratory supplies

Ruska Instrument Corp., 4607 Montrose Blvd., Houston 6, Texas
Geophysical instruments; high pressure viscometers; gas compressibility apparatus

Rust Industrial Company, 130 Silver St., Manchester, N. H.
"Rustrak" miniaturized strip-chart recorder

Rutherford Electronics Co., 8944 Lindblade St., Culver City, Calif.
Precision timers; pulse generators

Rutico Mfg. Co., 105-20 Metropolitan Ave., Forest Hills, N. Y.
Hydrometers; thermometers

Ryan Recording Thermometer Co., 851 Poplar Pl., Seattle 44, Wash.
Portable recording thermometers for perishables in transit or storage

Ryan Tool & Engineering Co., 19159 John R. St., Detroit 3, Mich.
Height gages; fixtures; special machinery

S

Sackman Co., W. H., Inc., P. O. Box 546 Pottstown, Penna.
Stainless steel, brass, copper, shafts

Sage Electronics Corp., 302 N. Goodman St., Rochester 7, N. Y.
Miniature wire-wound, power resistors

Samarius Electronics, 123 Canal St., Shelton, Conn.
Potentiometer windings to specification, linear and functional

Sampson Chemical & Pigment Corp., 2830 W. Lake St., Chicago 12, Ill.
Phosphorescent and fluorescent coatings

San Fernando Electric Mfg. Co., 1509 First St., San Fernando, Calif.
Hermetically sealed capacitors; rf filters; precision wire-wound single and multi turn potentiometers

San Jose Scientific Co., San Jose, Calif.
Millivolt recorders

Representative—Texas, Okla., Ark., La.
Arnold Barnes Co.
3603 Lemmon Ave., Dallas 19, Texas LA-6-8735
3913 East 2nd Place, Tulsa 12, Okla. MA-6-7767

Sanborn Co., 175 Wyman St., Waltham 54, Mass.
Oscillographic recording equipment: systems, recorders, preamplifiers; displacement indicators, recorders, pick-ups; medical instruments
(See advertisement on page 12)

Philadelphia Area Representative
The I. E. Robinson Company
7404 West Chester Pike, Upper Darby, Pa.
SHerwood 8-1294, FLanders 2-7017

Sanders Associates, Inc., 95 Canal St., Nashua, N. H.
Components and systems in electronics, hydraulics and electro-mechanics, radar and missile systems

Sandsteel Spring Div., Sandvik Steel Inc., 1702 Nevins Rd., Fair Lawn, New Jersey
Special springs
(See advertisement on page 180)

Sandy Mfg. Co., 26 Maple Ave., Sellersville, Pa.
Dial faces

Sangamo Electric Company, P.O. Box 359, Springfield, Ill. Capacitor Div., Marion, Ill. Electronic Components Div., 2110 Clear Lake Rd., Springfield, Ill.
Electric meters; instrument transformers; time switches and radio-condensers

Santay Corp., 351 No. Crawford Ave., Chicago 24, Ill.

Sarco Company, Inc., 350 Fifth Ave., New York 1, N. Y.
Temperature and pressure regulators; steam traps; strainers

Sargent & Co., E. H., 4647 Foster Ave., Chicago 30, Ill.
Laboratory supplies and chemicals

Sarkes Tarzian, Inc., Rectifier Div., 415 N. College Ave., Bloomington, Ind.
Selenium rectifiers; silicon rectifiers; semiconductors

Sawyer Bailey Corp., 1559 Niagara St., Buffalo 13, N. Y.
Air compressors

Saxonburg Ceramics, P. O. Box 100, Saxonburg, Pa.
Insulation testers; insulating materials; industrial ceramics

Scalco Controls, Inc., C. C. Pump Mfg. Div., P. O. Box 41, Cooper St., Delanco, Palmyra, N. J.
Temperature alarms; switches

SCAM Instrument Corp., 1811 W. Irving Park Rd., Chicago 13, Ill.
Annunciator and alarm systems

Philadelphia Representative
Arobone and Cline
Wilford Building, 33rd & Arch Streets
Philadelphia 4, Penna. EVergreen 2-6520

Pittsburgh & Buffalo Representative
M. S. Jacobs & Associates, Inc.
810 Noblestown Rd., Pittsburgh 5, Pa. WA-1-6140
1807 Elmwood Ave., Buffalo 7, N. Y. DE-3229

Rep—Lower Wis., No. Ill., No. Ind.
Paul B. Shannon Co.
10336 S. Western Ave., Chicago 43, Ill.
BEverly 3-3392

Schaar & Co., 7300 W. Montrose, Chicago 34, Ill.
Laboratory supplies

Schade Valve Mfg. Co., 2527 N. Bodine St., Philadelphia 33, Pa.
Automatic regulating valves

Schaefer Bros., Co., 1059 W. 11th St., Chicago 7, Ill.
Rheostats

Schaevitz Engineering, Route 130 at Schaevitz Blvd., Camden, N. J.
Accelerometers, extensometers, position indicators, remote metering equipment; differential transformers

Schaffer Poidometer Co., 2828 Smallman St., Pittsburgh 22, Pa.
Scales

Schauer Mfg. Corp., 4500 Alpine Ave., Cincinnati 42, Ohio
Battery chargers; battery eliminators; rectifiers

Scheidl Mfg. Co., 1985 Great Neck Rd., Copiague, L. I., N. Y.

Scherr Co., Inc., George, 200 Lafayette St., New York 12, N. Y.
Optical measuring and inspection equipment

Scherr Optical Tools, Inc., 200 Lafayette St., N. Y. 12, N. Y.
Shop instruments and components

Schlumberger Well Surveying Corp., Box 550, Ridgefield, Conn.
Nuclear magnetic resonance analyzers

Schneider-Cogswell, Inc., 1849 N. Halstead St., Chicago 14, Ill.
Precision lenses and prisms

Schnitzer Alloy Products Co., 537 Pine St., Elizabeth 1, N. J.

Schrader's Son, A., 470 Vanderbilt Ave., Brooklyn 38, N. Y.
Pneumatic cylinders; safety valves; regulating valves; solenoid valves

Schueler & Co., 75 Cliff St., New York 38, N. Y.

Schutte & Koerting Co., 2259 State Rd., Cornwells Heights, Bucks County, Pa.
Heat transfer equipment; vacuum pumps; rotameters and flow indicators; tubes; valves; spray nozzles; atomizers; gear pumps; desuperheaters
(See advertisement on page 92)

Schutte Optical Co., Inc., 16 Dowling Place, Rochester 5, N. Y.
Optical instruments and components

Schuttig & Co., 5005 Calvert Rd., College Park, Md.
Radio and wired remote-control equipment

Schweitzer Mfg. Co., Inc., E. O., 1002 Dundee Rd., Northbrook, Ill.
Electrical instruments

Sciaky Bros., Inc., 4915 W. 67th St., Chicago 38, Ill.
Welding equipment including control systems

Scientific Apparatus Co., 4 Landscape Ave., Yonkers 5, N. Y.
Laboratory apparatus

Scientific Balance and Instrument Service, 2650 S. W. Temple, Salt Lake City 15, Utah
High precision laboratory analytical balances

Scientific Equipment Co., 3527 Lancaster Ave., Philadelphia 4, Pa.
Laboratory apparatus

Scientific Glass Apparatus Co., Inc., 100 Lakewood Terrace, Bloomfield, N. J.
Glass apparatus and interchangeable ground glass joints; spectrophotometers; pH meters; ovens

Scientific Industries, Inc., 15 Park St., Springfield 3, Mass.
Time delay switches; electrical timers

Scientific Instrument Co., 1041 Second St., Detroit 26, Mich.
Industrial & laboratory thermometers; hydrometers; special laboratory apparatus

Scientific Instrument Development Labs., 204 W. Court St. Paris, Illinois
Industrial and scientific instruments

Scientific Wood Cabinet Co., 80-86 Holmes St., Belleville 9, N. J.
Wooden cases, cabinets, and chests

Scope Instrument Corp., Scope Building, Mamaroneck, N. Y.

Scott, Inc., Hermon Hosmer, 385 Putnam Ave., Cambridge 39, Mass.
Electronic equipment for measurement, analysis and reproduction of sound, noise and vibration, including meters, analyzers; amplifiers, radio tuners and turntables

Scott Testers, Inc., 166 Blackstone St., Box 983, Providence, R. I.
Testing machines

Scovill Mfg. Co., P. O. Box 1820, Waterbury 20, Conn.
Tube fittings

Scrayco Manufacturing Co., 201 Green Ave., Middlesex, N. J.
Level controls for bin and bulk materials

Scruggs Co., Loyd, P. O. Drawer 232, Festus, Missouri
Shaded pole, universal, precision, geared and capacitor-type motors

Scully-Jones and Co., 1901 S. Rockwell St., Chicago 8, Ill.
Indicating flow meters; pressure gages; thermometers

Sealectric Switch & Relay Corp., 6025 N. Keystone Ave., Chicago 46, Ill.
Snap acting switches; relays, connectors, contacts

Sealol Corp., Providence 5, R. I.
Dial indicators; mechanical seals

Seals, Ltd., 1010 Mission St., South Pasadena, Calif.
Glass insulated electrical connectors

Sealtron Corp., Reading Rd., at Amity, Box 72, Cincinnati 15, Ohio
Glass-to-metal hermetic seals

Seamlex Co., Inc., 41-33 24th St., Long Island City 1, N. Y.

Seco Mfg. Co., 5015 Penn Ave., South, Minneapolis 19, Minn.
Electronic test equipment

Secon Metals Corp., 7 Intervale St., White Plains, N. Y.
Wire, alloys

Security Controls, Inc., 503 Franklin St., Buffalo 2, N. Y.
Machine safety and control equipment

Security Valve Corp., 541 W. Garfield Ave., Glendale 4, Calif.
Valves for high, low or differential pressure, electric or automatic shut-off; for chemical, oil or gas per API and ASME specs
(See advertisement on page 212)

Seedburo Equipment Co., 618 W. Jackson Blvd., Chicago 6, Ill.
Moisture-testers; ovens; scales; thermometers

Seederer-Kohlbusch, Inc., 25 S. Van Brunt St., Englewood, N. J.
Analytical balances and weights; spring dynamometers

Seegers Manufacturing Co., 515 W. Main St., Barrington, Ill.
Gauge components; temperature and humidity instruments; synchro-output pressure pickups
(See advertisement on page 148)

Seely Instrument Co., 377 Fourth St., Niagara Falls, N. Y.
Interval timers; temperature and pressure pilots

Seismograph Service Corp., P.O. Box 1590, Tulsa 1, Okla.
Worldwide geophysical consulting service; specialized prospecting equipment; continuous velocity logging; lorac service; custom electronics manufacture

Selas Corp. of America, Dresher, Pa.
Furnaces; ovens; brazing machinery; micro-filtration equipment; separators; flow rate indicators

Sell Electric Co., H. H., 3240 Dakota Ave., Minneapolis 16, Minn.
Phase sequence indicators

Sel-Rex Corp., 155 Manchester Place, Newark 4, N. J.
Precious metals processes; metallic power rectifiers; airborne power equipment; liquid clarification filters

Semi-Elements Inc., Saxonburg Blvd., Saxonburg, Pa.
Receiving antennas, accessories; photodiodes; open lead-in wire

Semimetals, Inc., 15 E. 48th St., New York 17, N. Y.
Silicon crystal growing and refining equipment; single-crystal germanium, N-type or P-type for diode and transistor applications

Semon Bache & Co., (See Bache)

Sendur Inc., 4878 W. Grand Ave., Chicago 39, Ill.
Electrical instruments

Sensitive Research Instrument Corp., 310 Main St., New Rochelle, N. Y.
Electrical instruments measuring quantities or values of small current or voltage

Philadelphia Area Representative
The I. E. Robinson Company
7404 West Chester Pike, Upper Darby, Pa.
SHerwood 8-1294, FLanders 2-7017

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- TRANSDUCERS
- SERVO-KITS

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14 CARMER AVE. BELLEVILLE 9, N.J.

For more information circle **391** on inquiry card.

Sentinel Glass Co., Hatboro, Penna
Special flow meters for liquids and gases; glass products for flow and measurement; glass working

Sequoia Process Corp., 871 Willlow St., P. O Box 1007, Redwood City, Calif.
Electrical and electronic components

Sequoia Wire and Cable Co., 2201 Bay Rd., Redwood City, Calif.
Electronic hook-up wire, cables and assemblies; shielded construction, specialty cables; standard insulations, and Teflon and Hyrad-irradiated insulation

Seraphin Test Measure Co., 1314 North 7th St Philadelphia 22, Pa.

Serdex, Inc., 91 Cambridge St., Boston 14, Mass
Humidity indicators, recorders and controllers

Service Diamond Tool Co., 2505 Burdette, Ferndale Mich.
Rockwell hardness testers, diamond penetrators

Chicago Representative
Service Associated, Inc.
9236 S. Vincennes Ave., Chicago 20, Ill
HIlltop 5-9555

Service Recorder Co., 1013½ Rockwell Ave., Cleveland 14, Ohio
Time recorders for vehicles, machines; fuel consumption meters

Representative
John T. Fuhrman, Jr.
6822 Thomas Blvd., Pittsburgh 8, Pa
MOntrose 1-3838

Servo Corp. of America, 2020 Jericho Pike, New Hyde Park, L. I., N. Y.
Electronic equipment for automation; servomechanisms; analog and digital computers; infrared detection systems

Servo Recording Instruments, Inc., 517 Grand Ave Phoenix, Arizona
Personnel-safety dosimeters, self-reading

Servo-Systems Co., 55 Meeker Ave., Newark, N. J
Experimental set servo systems; experimental gear sets
(See advertisement on page 268)

Servo-Tek Products Co., Inc., 1086 Goffle Rd., Hawthorne, N. J.
Motors; tachometer generators; adjustable-speed drives; motor-generator sets; constant-reference voltage supplies; servomechanisms; amplifiers; motor controllers

Servomechanisms Inc., Mechatrol Div., 625 Main St Westbury, L. I., N. Y.
Computers; amplifiers; servomotors

Servomechanisms, Inc., 12500 Aviation Blvd., Hawthorne, Calif.
Electronic and electromechanical sub-systems and components

Servonic Instruments, Inc., Costa Mesa, Calif.
Wire-wound potentiometer-type transducers (translation potentiometers, pressure pickups, slip rings, specially designed switches for guided missiles)
(See advertisement on page 150)

Servonics, Inc., 834 N. Henry St., Alexandria, Va.
Potentiometers; electromechanical integrators; magnetic amplifiers

Servospeed Div., Electro Devices, Inc., 4 Godwin Ave., Patterson I, N. J.
Electronic motor speed control systems for variable speed by manual selection or by automatic control as process or variable function
(See advertisement on page 125)

Servotrol, Inc., 10130 W. Pacific Ave., Franklin **Park, Ill.**
Voltage-dividing resistors

Sessions Clock Co., Box C, Forestville, Conn
Timepieces and automatic timers

Seth Thomas Clocks, Div., General Time Corp., 135 S. Main St., Thomaston, Conn.
Household clocks; outdoor and tower clocks; clock movements for industrial purposes; electric timers

Seton Name Plate Co., 431—AU West Rock Ave., New Haven 15, Conn.
Metal and plastic name plates, instrument panels, dials; identification marking systems for valves, switches controls

Severance Tool Industries, Inc., 754 Iowa Rd., Saginaw, Mich.

Shallcross Controls, Inc., P.O. Box 497, Markesan, Wis.
Electric combustion, draft, and process control equipment

Shallcross Manufacturing Co., Preston St., Selma, N. C.
Wirewound and power resistors; switches; delay lines; attenuators; communications test sets; high voltage measuring equipment

Shand & Jurs Co., 8th & Carlton St., Berkeley 10, Calif.
Remote-reading equipment for process variables; remote control for motors, valves, data processing apparatus; storage tank fittings

Shawmut Engrg. Co., 195 Freeport St., Boston 22, Mass.
Abrasion testers

Sheffield Corp., P.O. Box 893, Dayton 1, Ohio
Pneumatic, electric, electronic, and mechanical gages and measuring instruments; machine tools

Sheffield Western Corp., 3630 San Fernando Rd Glendale 4, Calif
Dial bore gages, micrometers, bar gages

Shelp Mfg. Co., Henry H., 6th & **Columbia** Ave., **Philadelphia 22, Pa.**

Shelby Instrument Co., 1701 Magnolia St., Long Beach 13, Calif.
Electrical instruments

Sheldon & Co., E. H., Muskegon 82, Mich
Laboratory furniture

Sheldon Machine Co., Inc., 4258 N. Knox Ave Chicago 41, Ill.
Metalworking lathes; milling machines; shapers; geared-head lathes

Shepard Labs., Broad St. & Park Ave., Summit, N. J.
Automatic exposure controllers; relays; ordnance instruments

Sherron Metallic Corp., 1201 Flushing Ave., Brooklyn 6, N. Y.
Electrical testing equipment

Shielding, Inc., P.O. Box 59, 19 Read St., Riverton, N. J.
Shielding enclosures, r-f type

Shockley Transistor Corp., Stanford Industrial Park Palo Alto, Calif.
Switches, transistor diodes

Shore Instrument & Mfg. Co., 90-35 Van Wyck Expressway, Jamaica 35, N. Y.
Scleroscope hardness testers
(See advertisement on page 105)

Shunk Mfg. Co., Bucyrus, Ohio

Shure Brothers, Inc., 222 Hartrey Ave., Evanston, Ill
Microphones

Shurite Meters, 130 Wallace St., New Haven 8, Conn
Electrical panel and portable instruments
(See advertisement on page 84)

Sibley Co., Haddam, Conn.
Printed circuits; commutation discs; silver, gold, nickel, rhodium, palladium, tin plating; technical precision plating; plating on non-conductors for rotors, slip-rings, etc.

Sickles & Sons, Inc., 904 Chestnut St., Philadelphia 7, Pa.

Sickles Div., F. W., General Instrument Corp., P. O Box 330, Chicopee, Mass.
Coils and tuning mechanisms for radio, television and military applications

Siemens-New York, Inc., 350 Fifth Ave., New York 1, N. Y.

Siemon Manufacturing Co., Box 275, Wayne, Ill

Sierra Electronic Corp., 3885 Bohannon Dr., Menlo **Park, Calif.**
RF Wattmeters; coaxial terminations; wave **analyzers; line-fault** analyzers; carrier-frequency **voltmeters; special equipment**

Sierra Engineering Co., 123 E. Montecito Ave Sierra Madre, Calif.
Miniature mechanical chain and **sprockets**

Sightmaster Corp., 111 Cedar St., **New Rochelle, N. Y.**
Microwave calorimeters; relays; **welding rods**

Sigma Instruments Inc., 170 Pearl St., South Braintree 85, Mass.
Sensitive relays (ac and dc, polar, latching, null-seeking, etc.), magnetic stepping motor, pulse counter

Sigmamator, Inc., 600 North Main St., Middleport N. Y.
Pumps

Signal Electric Mfg. Co., **Menominee,** Mich
Fractional-hp motors

Signal Indicator Corp., 60 Stewart Ave., Brooklyn N. Y.
Dial lights; **edge lighting assemblies**

Signal Transformer Co., **2518 Coney** Island Ave. Brooklyn 23, N. Y.
Transformers

Sig-Trans, Inc., Haverhill Rd., Amesbury, Mass

Sillcocks-Miller Co., 10 W. Parker Ave., Maplewood N. J.

Simmonds Aerocessories, Inc., 105 White Plains Rd. Tarrytown, N. Y.
Electronic fuel gages; liquid level sensing devices; test equipment; fuel injection systems; remote controls; capacitance bridges

Simonds Saw and Steel Co., Ohio St., Lockport, N. Y.
Permanent magnet materials; soft magnetic materials; high and low expansion alloys

Simplex Time Recorder Co., **Sanborn** St., P. O Box 280, Gardner, Mass.
Time recorders; printing counters; time stamps; elapsed time indicators; productographs; master clocks; program systems

Simplex Valve & Meter Co., 7 E. Orange St., Lancaster, **Penna.**

Simpson Electric Div., Amer. **Gage & Machine Co** 5200 W. Kinzie St., Chicago 44, Ill.
Electronic test equipment; **panel meters;** test equipment for radio, TV, **air conditioning,** and **refrigeration;** meter relays; aviation instruments; galvanometer

Representative—St. Louis, Kansas City
Norman W. Kathrinus & Co.
4356 Duncan, St. Louis 10, OL-2-7665
4306 Cambridge, Kansas City 3, Kan. JO-2-4108

Representative—Philadelphia, Baltimore, Washington D. C., Pittsburgh
Samuel K. Macdonald, Inc.
1531 Spruce St., Phila. 2 Kingsley 5-1205

Simpson Optical Mfg. Co., 3200 W. Carroll Ave., Chicago 24, Ill.
Lenses; prisms; optical flats and complete optical systems
(See advertisement on page 129)

East Coast Representative
William de-K. Burton
Concord Rd., South Lincoln, Mass.
Clearwater 9-9532

West Coast Representative
H. M. Shoemaker & Associates
1127 Wilshire Blvd., Los Angeles 11, Calif
Huntley 2-4672

Sinclair Collins Valve Co., 451 Morgan Ave., Akron 11, Ohio
Automatic controllers and control valves

Single Crystal Corp of America (Sicoa), RD 1, Saxonburg Blvd., Saxonburg, Penna.
Single crystals; ultra-pure chemicals; scintillation materials

Sipp-Eastwood Corp., **39 Keen St.,** Paterson, N. J.
Electrical and **electronic instruments; transformers**

Sittler Corp., 16 North Ada St., Chicago 7, Ill
Bare, braided, and stranded copper **bonding jumpers** and cable assemblies; voltage and **continuity testers**

Size Control Company, Div. of American Gage & Machine Co., 2500 Washington Blvd., **Chicago** 12, Ill
Precision inspection equipment; centerless lapping machines

Sjostrom Co., John E., 1711 N. Tenth St., Philadelphia 22, Pa.
Laboratory furniture

Skinner Electric Valve Div., **Skinner Chuck** Co., New Britain, Conn.
Solenoid **valves**

Skyway Precision Tool Co., 3217 **Casitas Ave., Los Angeles 26, Calif**
Torque testers

Slater Electric & Mfg. Co., Inc., 45 Sea Cliff Ave., Glen Cove, N. Y.
Valves; pressure **snubbers; switches, wiring devices**

Slaughter Co., Young & College Sts., P.O. Box 606, Piqua 2, Ohio
High voltage and electrical leakage testing equipment

Slip Ring of America, 3612 West Jefferson, Los Angeles 16, Calif.
Aircraft Instruments; intervalometers; precious metal contacts telemetering systems, rf, radio remote control

Slocomb Co., J. T., 65 Matson Hill Rd., South Glastonbury, Conn.
Micrometer calipers

Small Motors, Inc., 2076 Elston Ave., Chicago 14, Ill.
Universal fractional-hp motors, dynamotors, shaded pole motors and generators

Smith Co., Arthur F., 311 Alexander St., Rochester 3, N. Y.

Smith Co., S. Morgan, York, Pa.
Electromechanical components

Smith Corp., A. O., 5715 Smithway, Los Angeles 22, Calif.
Gasoline and oil meters

Smith Inc., Herman H., 2326 Nostrand Ave., Brooklyn 10, N. Y.
Phone tip plugs; banana plugs; receptacles

Smith-Corona Marchant Inc., 1475 Powell St., Oakland 8, Calif.
Fully and semi-automatic all-electric desk calculators; electronic computers and data processing systems

Smith Metal Treatment Co., R. G., 245 South St., Newark 5, N. J.

Smith Products Corp., Graydon, 52 Commonwealth Ave., West Concord, Mass.

Smok-Trol Corp., Ossining, N. Y.

Snap-Tite, Inc., 201 Titusville Rd., Union City, Pa.
Quick connect-disconnect couplings for hydraulic and pneumatic fluid transfer lines

Sodemann Heat & Power Co., 1737 Macklind Ave., St. Louis 10, Mo.
Air conditioned moist cabinet

Soiltest, Inc., 4711 W. North Ave., Chicago 39, Ill.
Engineering test apparatus for soils, concrete and asphalt

Sola Electric Co., 4633 W. 16th St., Chicago 50, Ill.
Transformers; automatic voltage adjusters

Sonex, Inc., 73 South State Rd., Upper Darby, Penna.

Sonoflux Corp., P.O. Box 14105, Houston 21, Texas
Non-destructive inspection and testing equipment

Sorensen & Co., Inc., Richards Ave., South Norwalk, Conn.
Chokes; current regulators; voltage regulators; transformers
  New York Metropolitan Area Rep.
  RMC Associates
  236 E. 75th St., New York 21, TRafalgar 9-2023
  391 Grand Ave., Englewood, N. J., LOwell 7-3933

  Philadelphia Area Representative
  The I. E. Robinson Company
  7404 West Chester Pike, Upper Darby, Pa.
  SHerwood 8-1294, FLanders 2-7017

Soroban Engrg. Inc., P.O. Box 1717, Melbourne, Fla.
Data processing devices and systems; paper tape readers, perforators, preparation verifiers, keyboards; comparators

Sorgel Electric Co., 838 W. National Ave., Milwaukee 4, Wisc.
Dry-type transformers; saturable reactors
  Rep—W. Pa., W. Va., Ohio Border Counties
  William E. Wargo Company
  211 Yarrow Lane, Pittsburgh 36, Pa.
  TUxedo 4-5800, 4-5801

Sorvall, Ivan, P. O. Box 230, Pearl St., Norwalk, Conn.
Laboratory instruments

Sound Apparatus Co., Stirling, N. J.
Sound measuring equipment; graphic recorders

South Bend Lathe Works, 303 E. Madison St., South Bend 22, Ind.
Precision lathes; spindle milling machines; bench shapers; drill presses; pedestal tool grinders

Southern Desk Co., Hickory, N. C.
Laboratory furniture

Southern Electronics Corp., 150 West Cypress Ave., Burbank, Calif.
Precision capacitors including plastic film types
(See advertisement on page 15)

Southwestern Industrial Electronics Co., 2831 Post Oak Road, Houston 19, Texas
Geophysical instruments; industrial controls; electronic test instruments; flowmeters; computers; transformers; tape recorders

Spar Electrical & Development, Inc., 530 Davisville Rd., Southampton, Penna.

Sparling Meter Co., 225 N. Temple City Bldg., El Monte, Calif.
Main-line and irrigation water meters; recording instruments, and control equipment

Spartan Coach & Mfg. Co., 222 W. Huron St., Chicago 10, Ill.
Edge-lighted panels

Sparton Corporation, Jackson, Michigan
Control and supervisory telemetering devices and design

Spaulding Fibre Co., 310 Wheeler St., Tonawanda, N. Y.
Fibre and plastic rods, tubes and fabricated parts

Special Instruments Lab. Inc., 312 W. Vine Ave., Knoxville, Tenn.
Radioactivity and geophysical instruments

Special Screw Products Co., 700 Northfield Rd., Bedford, Ohio
High pressure, corrosion-resistant, flared tube fittings
  Rep—W. Pa., W. Va., Md. panhdle, Ohio bdr.
  Sentinel Products Co. (Wayne B. Farley)
  36 Beltzhoover Ave., Pittsburgh 10, Pa.
  HEmlock 1-0774

Specialized Instruments Corp., 601 O'Neil Ave., Belmont, Calif.
Ultra-speed centrifuges

Specialties Inc., Skunks Misery Rd., Syosset, L. I., N. Y.
Computers; airborne instruments and cameras; air dehydrators

Specialty Engineering and Mfg. Co., 108 E. Dedham St., Boston, Mass.
Bourdon tubes and associated assemblies

Specialty Insul. Mfg. Co., Inc., 55 Center Ave., Hoosick Falls, N. Y.

Specialty Screw Machine Products Co., Dillerville Rd., Lancaster, Pa.

Spectralab Instruments, 608 Fig Ave., Monrovia, Calif.
Telemetering systems; insulations breakdown testers

Spectrol Electronics Div., Carrier Corp., 1704 S. Del Mar St., San Gabriel, Calif.
Electrical and electronic components
  Representative—Philadelphia, Baltimore, Washington D. C., Pittsburgh
  Samuel K. Macdonald, Inc.
  1531 Spruce St., Phila. 2, KIngsley 5-1205

Spectrum Instruments Inc., Box 61, Steinway Station, Long Island City 3, N. Y.
Filters, medical insts., spectrum analyzers
(See advertisement on page 89)

Speedometer Electric Co., 690 Van Ness Ave., San Francisco 2, Calif.
Survey footmeter

Speedway Manufacturing Co., 1834 S. 52nd Ave., Cicero 50, Ill.

Speer Carbon Co., St. Marys, Pa.
Resistors and coil forms

Speidel & Co., Inc., Chas. W., 614 Baltimore Ave., Fernwood, Pa.
Surveying instruments

Spellman Television Co., Inc., 3029 Webster Ave., Bronx 67, N. Y.
High-voltage specialties; power supplies
(See advertisement on page 143)

Spence Engineering Co., Inc., 53 Grant St., Walden, N. Y.
Regulating valves; desuperheaters; strainers

Spencer-Kennedy Labs., Inc., 1320 Soldiers Field Rd., Boston 35, Mass.
Electronic laboratory test equipment: wide band and chain pulse amplifiers; fast-rise pulse generators; square wave generators; variable electronic filters

Spencer Mfg. Co., S. M., 3 Cornhill St., Boston 8, Mass.

Spencer Thermostat Div., Metals & Controls Corp., Attleboro, Mass.
Overheat motor protectors; starting relays; circuit breakers; precision snap switches

Sperry Gyroscope Co., Inc., Great Neck, N. Y.
Aircraft and marine navigational instruments

Sperry Products, Inc., Shelter Rock Road, Danbury, Conn.
Special railway testers

Sperry-Sun Well Surveying Co., 3118 Blodgett Ave., P. O. Box 8008, Houston 4, Texas
Underground surveying instruments for oil wells

Sphinx American Co., 32-32 58th St., Woodside 77, L. I., N. Y.

MINIATURE
Screws, Nuts & Washers
00-90 0-80 1-64 1-72, 1/16" to 1 inch
Tweezers
G. Curtis Sprang
607 So. Hill Street
Los Angeles 14, Calif.

For more information circle 252 on inquiry card.

Spicer Co., Walter, 2088 E. Villa St., Pasadena, Calif.
Precision resistors wire-wound to specification

Spinco Div., Beckman Instruments, Inc., Stanford Industrial Park, Palo Alto, Calif.
Instruments used in medical, scientific, and commercial research; and in clinical medicine

Spitfire Tool Co., 2931 N. Pulaski Rd., Chicago 41, Ill.
Monochromatic light sources

Spivey, Inc., James S., 4908 Hampden Lane, Washington 14, D. C.
Electronic equipment

Split Ballbearing, Div. of MPB, Inc., Highway Four, Lebanon, N. H.
Miniature ball bearings

Sprague Electric Co., Marshall St., North Adams, Mass.
Electrical instruments; resistors; capacitors; and circuit components

Sprague Engineering Corp., Budlong Ave. at 135 St., Gardena, Calif.
Automatic shut-off valves; hydraulic, pneumatic and fuel system test equipment, high-pressure air-operated pumps, gages savers; high pressure specialties
(See advertisement on page 153)

Sprague Meter Co., 35 South Ave., Bridgeport 4, Conn.
Liquid meters

Sprang, G. Curtis, 607 S. Hill St., Los Angeles 14, Calif.
Miniature screws, nuts, washers; tweezers
(See advertisement on page 269)

Sprengnether Instrument Co., Inc., W. F., 4567 Swan Ave., St. Louis 10, Mo.
Geophysical, seismological and research instruments; vibration analysis recorders; development of special instrumentation
(See advertisement on page 175)

Spring Specialty Co., 23 N. 5th Ave., Maywood, Ill.
Scribers; magnets; springs

Square D Company, 4041 N. Richards St., Milwaukee 12, Wis.
Switches; relays; pressure and vacuum controllers; control valves; motor starters

Square D Co., see also Kollsman Instr. Div.

Squires Co., C. E., E. 18502 Syracuse Ave., Cleveland 10, Ohio
Boiler room instrumentation

Stackpole Carbon Co., St. Marys, Pa.
Carbon division: Carbon brushes; precious metal contacts; carbon metal modled products
Electronic division: Fixed and variable composition resistors; powdered iron cores; molded ferrite cores; permanent magnet materials; slide switches; composition capacitors; iron coil forms

Standard Arcturus Corp., 54 Clark St., Newark, N. J.
Vacuum tubes

Standard Automation Products, Division of General Industries of Amer., 1738 Ridgeway Rd., Havertown, Pa.
Screw machine products; precision gears; instrument parts; powdered metal machine parts

Standard Cabinet Co., 56 Washington St., Carlstadt, N. J.
Test chambers: altitude, temperature, humidity
(See advertisement on page 87)

Standard Controls Inc., 1130 Poplar Pl., Seattle 44, Wash.
Transducers; pressure control servovalves

Standard Dayton Corp., P. O. Box 1001, Dayton 1, Ohio
Fractional-hp motors

Standard Electric Time Co., 89 Logan St., Springfield 2, Mass.
Electric and electronic components, assemblies and systems for time control, communications, experimental power distribution and network analysis
(See advertisement on page 201)

PRECISION COMPONENTS
FROM
LEADING MANUFACTURERS

- PRECISION POTS
- SERVO MOTORS
- SYNCHROS

"OFF THE SHELF"
SAVE 50% TO 85%

- TACH GENERATORS
- TRANSDUCERS
- SERVO-KITS

THE
SERVO SYSTEMS CO.
14 CARMER AVE. BELLEVILLE 9, N.J.

For more information circle **391** on inquiry card.

Sentinel Glass Co., Hatboro, Penna
Special flow meters for liquids and gases; glass products for flow and measurement; glass working

Sequoia Process Corp., 871 Willlow St., P. O Box 1007, Redwood City, Calif.
Electrical and electronic components

Sequoia Wire and Cable Co., 2201 Bay Rd., Redwood City, Calif.
Electronic hook-up wire, cables and assemblies; shielded construction; specialty cables; standard insulations, and Teflon and Hyrad-irradiated insulation

Seraphin Test Measure Co., 1314 North 7th St. Philadelphia 22, Pa.

Serdex, Inc., 91 Cambridge St., Boston 14, Mass.
Humidity indicators, recorders and controllers

Service Diamond Tool Co., 2505 Burdette, Ferndale Mich.
Rockwell hardness testers; diamond penetrators

Chicago Representative
Service Associated, Inc.
9236 S. Vincennes Ave., Chicago 20, Ill
HIlltop 5-0555

Service Recorder Co., 1013½ Rockwell Ave., Cleveland 14, Ohio
Time recorders for vehicles, machines; fuel consumption meters

Representative
John T. Fuhrman, Jr.
6822 Thomas Blvd., Pittsburgh 8, Pa
MOntrose 1-3838

Servo Corp. of America, 2020 Jericho Pike, New Hyde Park, L. I., N. Y.
Electronic equipment for automation; servomechanisms, analog and digital computers; infrared detection systems

Servo Recording Instruments, Inc., 917 Grand Ave., Phoenix, Arizona
Personnel-safety dosimeters, self-reading

Servo-Systems Co., 55 Meeker Ave., Newark, N. J.
Experimental set servo systems; experimental gear sets
(See advertisement on page 268)

Servo-Tek Products Co., Inc., 1086 Goffle Rd., Hawthorne, N. J.
Motors; tachometer generators; adjustable-speed drives; motor-generator sets; constant-reference voltage supplies; servomechanisms; amplifiers; motor controllers

Servomechanisms Inc., Mechatrol Div., 625 Main St. Westbury, L. I., N. Y.
Computers; amplifiers; servomotors

Servomechanisms, Inc., 12500 Aviation Blvd., Hawthorne, Calif.
Electronic and electromechanical sub-systems and components

Servonic Instruments, Inc., Costa Mesa, Calif.
Wire-wound potentiometer-type transducers (translation potentiometers, pressure pickups, slip rings, specially designed switches for guided missiles)
(See advertisement on page 150)

Servonics, Inc., 834 N. Henry St., Alexandria, Va.
Potentiometers; electromechanical integrators; magnetic amplifiers

Servospeed Div., Electro Devices, Inc., 4 Godwin Ave., Patterson 1, N. J.
Electronic motor speed control systems for variable speed by manual selection or by automatic control as process or variable function
(See advertisement on page 125)

Servotrol, Inc., 10130 W. Pacific Ave., Franklin Park, Ill.
Voltage-dividing resistors

Sessions Clock Co., Box C, Forestville, Conn
Timepieces and automatic timers

Seth Thomas Clocks, Div., General Time Corp., 135 S. Main St., Thomaston, Conn.
Household clocks; outdoor and tower clocks; clock movements for industrial purposes; electric timers

Seton Name Plate Co., 431—AU West Rock Ave., New Haven 15, Conn.
Metal and plastic name plates, instrument panels, dials; identification marking systems for valves, switches controls

Severance Tool Industries, Inc., 754 Iowa Rd., Saginaw, Mich.

Shallcross Controls, Inc., P.O. Box 497, Markesan, Wis.
Electric combustion, draft, and process control equipment

Shallcross Manufacturing Co., Preston St., Selma N. C.
Wirewound and power resistors; switches; delay lines; attenuators; communications test sets; high voltage measuring equipment

Shand & Jurs Co., 8th & Carlton St., Berkeley 10, Calif.
Remote-reading equipment for process variables; remote control for motors, valves, data processing apparatus; storage tank fittings

Shawmut Engrg. Co., 195 Freeport St., Boston 22, Mass.
Abrasion testers

Sheffield Corp., P.O. Box 893, Dayton 1, Ohio
Pneumatic, electric, electronic, and mechanical gages and measuring instruments; machine tools

Sheffield Western Corp., 3630 San Fernando Rd. Glendale 4, Calif.
Dial bore gages, micrometers, bar gages

Shelp Mfg. Co., Henry H., 6th & Columbia Ave., Philadelphia 22, Pa.

Shelby Instrument Co., 1701 Magnolia St., Long Beach 13, Calif.
Electrical instruments

Sheldon & Co., E. H., Muskegon 82, Mich
Laboratory furniture

Sheldon Machine Co., Inc., 4258 N. Knox Ave Chicago 41, Ill.
Metalworking lathes; milling machines; shapers geared-head lathes

Shepard Labs., Broad St. & Park Ave., Summit, N. J.
Automatic exposure controllers; relays; ordnance instruments

Sherron Metallic Corp., 1201 Flushing Ave., Brooklyn 6, N. Y.
Electrical testing equipment

Shielding, Inc., P.O. Box 59, 19 Read St., Riverton, N. J.
Shielding enclosures, r-f type

Shockley Transistor Corp., Stanford Industrial Park Palo Alto, Calif.
Switches, transistor diodes

Shore Instrument & Mfg. Co., 90-35 Van Wyck Expressway, Jamaica 35, N. Y.
Scleroscope hardness testers
(See advertisement on page 105)

Shunk Mfg. Co., Bucyrus, Ohio

Shure Brothers, Inc., 222 Hartrey Ave., Evanston, Ill
Microphones

Shurite Meters, 130 Wallace St., New Haven 8, Conn
Electrical panel and portable instruments
(See advertisement on page 84)

Sibley Co., Haddam, Conn.
Printed circuits; commutation discs; silver, gold, nickel, rhodium, palladium, tin plating; technical precision plating; plating on non-conductors for rotors, slip-rings, etc.

Sickles & Sons, Inc., 904 Chestnut St., Philadelphia 7, Pa.

Sickles Div., F. W., General Instrument Corp., P. O Box 330, Chicopee, Mass.
Coils and tuning mechanisms for radio, television and military applications

Siemens-New York, Inc., 350 Fifth Ave., New York 1, N. Y.

Siemon Manufacturing Co., Box 275, Wayne, Ill

Sierra Electronic Corp., 3885 Bohannon Dr., Menlo Park, Calif.
RF Wattmeters; coaxial terminations; wave **analyzers**; line-fault analyzers; carrier-frequency voltmeters; **special equipment**

Sierra Engineering Co., 123 E. Montecito Ave Sierra Madre, Calif.
Miniature mechanical chain and sprockets

Sightmaster Corp., 111 Cedar St., New Rochelle, N. Y
Microwave calorimeters; relays; welding rods

Sigma Instruments Inc., 170 Pearl St., South Braintree 85, Mass.
Sensitive relays (ac and dc, polar, latching, null-seeking, etc.), magnetic stepping motor, pulse counter

Sigmamator, Inc., 600 North Main St., Middleport N. Y.
Pumps

Signal Electric Mfg. Co., Menominee, Mich
Fractional-hp motors

Signal Indicator Corp., 60 Stewart Ave., Brooklyn N. Y.
Dial lights; edge lighting assemblies

Signal Transformer Co., 2518 Coney Island Ave Brooklyn 23, N. Y.
Transformers

Sig-Trans., Inc., Haverhill Rd., Amesbury, Mass

Sillcocks-Miller Co., 10 W. Parker Ave., Maplewood N. J.

Simmonds Aerocessories, Inc., 105 White Plains Rd. Tarrytown, N. Y.
Electronic fuel gages; liquid level sensing devices; test equipment; fuel injection systems; remote controls; capacitance bridges

Simonds Saw and Steel Co., Ohio St., Lockport, N. Y.
Permanent magnet materials; soft magnetic materials, high and low expansion alloys

Simplex Time Recorder Co., Sanborn St., P. O Box 280, Gardner, Mass.
Time recorders; printing counters; time stamps, elapsed time indicators; productographs; master clocks, program systems

Simplex Valve & Meter Co., 7 E. Orange St., Lancaster, Penna.

Simpson Electric Div., Amer. Gage & Machine Co. 5200 W. Kinzie St., Chicago 44, Ill.
Electronic test equipment; panel meters; test equipment for radio, TV, air conditioning, and refrigeration; meter relays; aviation instruments; galvanometers

Representative—St. Louis, Kansas City
Norman W. Kathrinus & Co.
4356 Duncan, St. Louis 10, OL 2-7665
4306 Cambridge, Kansas City 3, Kan. JO 2-4108

Representative—Philadelphia, Baltimore, Washington D. C., Pittsburgh
Samuel K. Macdonald, Inc.
1531 Spruce St., Phila. 2, Kingsley 5-1205

Simpson Optical Mfg. Co., 3200 W. Carroll Ave., Chicago 24, Ill.
Lenses; prisms; optical flats and complete optical systems
(See advertisement on page 129)

East Coast Representative
William de-K. Burton
Concord Rd., South Lincoln, Mass.
Clearwater 9-9532

West Coast Representative
H. M. Shoemaker & Associates
1127 Wilshire Blvd., Los Angeles 11, Calif
Huntley 2-4672

Sinclair Collins Valve Co., 454 Morgan Ave., Akron 11, Ohio
Automatic controllers and control valves

Single Crystal Corp. of America (Sicoa), RD 1, Saxonburg Blvd., Saxonburg, Penna.
Single crystals; ultra-pure chemicals; scintillation materials

Sipp-Eastwood Corp., 39 Keen St., Paterson, N. J.
Electrical and electronic instruments; transformers

Sittler Corp., 16 North Ada St., Chicago 7, Ill
Bare, braided, and stranded copper bonding jumpers and cable assemblies; voltage and continuity testers

Size Control Company, Div. of American Gage & Machine Co., 2500 Washington Blvd., Chicago 12, Ill.
Precision inspection equipment; centerless lapping machines

Sjostrom Co., John E., 1711 N. Tenth St., Philadelphia 22, Pa.
Laboratory furniture

Skinner Electric Valve Div., Skinner Chuck Co., New Britain, Conn.
Solenoid valves

Skyway Precision Tool Co., 3217 Casitas Ave., Los Angeles 26, Calif.
Torque testers

Slater Electric & Mfg. Co., Inc., 45 Sea Cliff Ave., Glen Cove, N. Y.
Valves; pressure snubbers; switches, wiring devices

Slaughter Co., Young & College Sts., P. O. Box 606, Piqua 2, Ohio
High voltage and electrical leakage testing equipment

Slip Ring of America, 3612 West Jefferson, Los Angeles 16, Calif.
Aircraft instruments; intervalometers; precious metal contacts telemetering systems, rf, radio remote control

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MINIATURE
Screws, Nuts & Washers
00-90 0-80 1-64 1-72, 1/16" to 1 inch
Tweezers
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Screw machine products; precision gears; instrument parts; powdered metal machine parts

Standard Cabinet Co., 56 Washington St., Carlstadt, N. J.
Test chambers: altitude, temperature, humidity

(See advertisement on page 87)

Standard Controls Inc., 1130 Poplar Pl., Seattle 44, Wash.
Transducers; pressure control servovalves

Standard Dayton Corp., P. O. Box 1001, Dayton 1, Ohio
Fractional-hp motors

Standard Electric Time Co., 89 Logan St., Springfield 2, Mass.
Electric and electronic components, assemblies and systems for time control, communications, experimental power distribution and network analysis

(See advertisement on page 201)

Standard Electrical Products Co., 2240 E. 3rd St., Dayton 8, Ohio
Relays

Representative—Ohio, W. Va., W. Pa.
Sid Levin & Associates
6252 Mayfield Rd., Cleveland 24, Ohio
HIllcrest 2-8340

Standard Electronic Research Corp., 2 East End Ave., New York 21, N. Y.
Electronic instruments; time and frequency standards

Standard Electronics Co., 1611 West 63rd St., Chicago 21, Ill.
Radio interference filters; toroidal coils & transformers; cable assemblies

Standard Engineering & Machine Co., Inc., 3709 Capitol Trail, Marshalltown, Wilmington 8, Del.
Automatic-control system; valves

Standard Gage Co., Inc., 70 Parker Ave., Poughkeepsie, N. Y.
Gages for linear measurements

Standard Horse Nail Corp., Box 316, New Brighton, Pa.
Screw machine products

Standard Molding Corp., 1517 E. 3rd St., Dayton 1, Ohio

Standard Products, Inc., 650 East Gilbert, Wichita, Kansas

Standard Pressed Steel Co., Box 204, Jenkintown, Pa.
Screw machine products; shop equipment, including desks, shelving, etc.

Standard Science Supply Co., 1231-39 N. Honore St., Chicago 22, Ill.
Laboratory supplies

Standard Scientific Supply Corp., 808 Broadway, New York N. Y.
Laboratory supplies

Standard Thermometer, Inc., 952 Dorchester Ave., Boston 25, Mass.
Mechanical thermometers

Standard Tool & Machine Co., Woodland Rd., Pittsburgh 38, Pa.
Thermocouple assemblies

Standard Transformer Corp., see Chicago Standard.

Stanley Aviation Corp., 2501 Dallas St., Denver 8, Colo.
Portable electric breadboards for circuit development

Stanley Works, 111 Elm St., New Britain, Conn.
Hand and electric tools; industrial and builders hardware; door controls; metal parts; coatings; steel and steel strapping

Stanut Manufacturing Co., Inc., 47-43 37th St., Long Island City 1, N. Y.
Coil winding equipment

Staplex Co., Air Sampler Div., 777 Fifth Ave., Brooklyn 32, N. Y.
High-volume air sampler for air pollution study and control

Star Compass Co., 110 Antwerp St., East Milton, Mass.
Compasses

Star-Martin Gage Co. 12 Bridge St. Concord, N. H.

Star Stainless Screw Co., 655 Union Blvd., Paterson 2, N. J.

Starr Corporation, 49 W. 19th St., New York 11, N. Y.
Vacuum coating of lenses, prisms and front surface mirrors

Starrett Co., L. S., Athol, Mass.
Precision tools; dial indicators; steel tapes

State Labs Inc., 649 Broadway, New York 12, N. Y.
Electronic tubes, crystal diodes, transistors

States Co., 19 New Park Ave., Hartford 6, Conn.
Electricity meter testers; terminal blocks
(See advertisement on page 134)

Statham Development Corp., 12411 W. Olympic Blvd., Los Angeles 64, Calif.
Temperature test chambers; regulated power supplies for strain gages; phase meters; angular accelerometer calibration equipment (torsional pendulum, torsional shake table)

Representative—Texas, Okla., Ark., La.
Arnold Barnes Co.
3603 Lemmon Ave., Dallas 19, Texas LA-6-8735
3913 East 2nd Place, Tulsa 12, Okla. MA-6-7707

Statham Instruments, Inc., 12401 W. Olympic Blvd., Los Angeles 64, Calif.
Pressure transducers; accelerometers; load cells; medical equipments; analytical instruments; strain gage carrier amplifiers

Statolet Corp., 65 61st St., Guttenberg, N. J.

Staver Co. Inc., Box 431, Bay Shore, L. I., N. Y.
Electrical contacts; shields

Stavid Engineering, Inc., U. S. Highway #22, Plainfield, N. J.
Research, development, production; field of electronic-electromechanical guidance, control, radar, infrared, beacons, telemetering, automation; simulation; test equipment

Stearns Electric Corp., 120 N. Broadway, Milwaukee 2, Wis.
Motor brakes

Steatite Div., American Lava Corp., Cherokee Blvd. & Mfgrs. Rd., Chattanooga 5, Tenn.
Ceramic products; steatite and titania

Stebar Co., 217-28th Ave., Minneapolis 11, Minn.
Microscopes

Steel City Testing Machines, Inc., 8817 Lyndon Ave., Detroit 38, Mich.
Testing machines

Midwestern Representative
Sherertz-Henderson Co.
5707 W. Lake St., Chicago 44, Ill.
COlumbus 1-1632

Stein Laboratories, Fred, 121 N. 4th St., Atchison, Kansas
Electronic moisture detectors

Steiner-Ives Co., Springfield Rd., Union, N. J.

Stelma, Inc., 190 Henry St., Stamford, Conn.
Telegraph telephone equipment; multichannel distortion monitors, repeaters, transistorized frequency shift systems; transistorized, printed-circuit distortion analyzers

Stepper Motors Corp., 11879 W. Florence Ave., Culver City, Calif.
Bi-directional dc step motors and precision digital positioners of pots, synchro, resolvers and switches

Sterling, Inc., 5200 W. Clinton Ave., Milwaukee 18, Wis.
Motor operated valves

Sterling Mfg. Co., 7201 Wentworth St., Cleveland, Ohio
Battery testers and portable electrical instruments

Sterling Precision Corp., Instrument Div., 34-17 Lawrence St., Flushing 54, N. Y.
Electrical and electronic instrumentation

Sterling Transformer Corp., 297 N. 7th St., Brooklyn 11, N. Y.
Transformers; chokes

Stevens-Arnold Inc., 7, Elkins St., So. Boston 27, Mass.
D-c a-c choppers commercial & military; ultra high speed relays
(See advertisement on page 69)

Stevens Mfg. Co., Inc., P. O. Box 1007, Mansfield, Ohio
Thermostats

Stevens Walden, Inc., 459 Shrewsbury St., Worchester 4, Mass.

Stevenson Mfg. Co., 1205 Washington St., La Porte, Ind.

Stewart Corp., F. W., 4311-13 Ravenswood Ave., Chicago 13, Ill.
Remote control and power drive flexible shafting; dual drive adapters; right angle adapters and angle drives

Stewart Instrument Co., 6507 Grand River Ave., Detroit 8, Mich.
Productive time and energy analyzers

Stewart, M. C., Ashburnham, Mass.
Meteorological instruments

Stewart-Warner Corp., 1826 Diversey Parkway, Chicago 14, Ill.
Tachometers and pressure gages

Sticht Co., Inc., Herman H., 27 Park Pl., New York 7, N. Y.
Electrical instruments
(See advertisement on pages 97, 109, 187)

Still-Man Equipment Corp., 429 E. 164th St., New York 56, N. Y.

Stimpson Co., Inc., Edwin B., 70 Franklin Ave., Brooklyn 5, N. Y.

Stockdale Engineering Co., P. O. Box #144, Haddonfield, N. J.
Wynn diaphragm valves

Stocker & Yale, Inc., P. O. Box 8, Marblehead, Mass.
Optical instruments

Stoddart Aircraft Radio Co., Inc., 6644 Santa Monica Blvd., Hollywood 38, Cal.
Rf instruments; sound and noise analyzers; attenuators; broad band pulse generators

Stoelting, C. H. Co., 424 N. Homan Ave., Chicago 24, Ill.
Psychological, physiological research instruments; recorders

Stokes Corp., F. J., 5500 Tabor Road, Philadelphia 20, Pa.
High-vacuum equipment; vacuum process equipment, high-vacuum pumps, gages; industrial tabletting presses; pharmaceutical tablet machinery; plastics molding presses

Stone Paper Tube Co., 900-922 Franklin St., N. E., Washington 17, D. C.
Spiral laminated tubes of electrical papers and plastic films

Stortz, John L., 405 State St., Watertown, N. Y.
Industrial and laboratory mercurial thermometers

Stow Manufacturing Co., 353 Shear St., Binghamton, N. Y.
Flexible shafts

Strahman Valves, Inc., 16 Hudson St., New York 13, N. Y.
Liquid-level gages; automatic valves

Strand Engineering Co., 1354 N. Main St., Ann Arbor, Mich.
Transistor testing sets

Strasbaugh Engrg. Co., R. Howard, 10900 Santa Fe Ave., Lynwood, Calif.
Optical equipment, metal lapping machine

Stratex Instrument Co., 3515 Sunset Blvd., Los Angeles 26, Calif.

Stratos, Div., Fairchild Engine & Airplane Corp., Bay Shore, L. I., New York
Aircraft air conditioning systems, auxiliary power turbines, fuel proportioners, compressors, cryogenic valves, electro magnetic relays

Rep—W. Pa., W. Va., Md. panhdle, Ohio bdr.
Sentinel Products Co. (Wayne B. Farley)
36 Beltzhoover Ave., Pittsburgh 10, Pa.
HEmlock 1-0774

Streeter-Amet Company, Grayslake, Ill.
Automatic measuring, weighing and counting machines

Stretch Wire Corp., P. O. Box 863, New Rochelle, N. Y.
Extensible wires and cables

Stromberg-Carlson, Div. of Gen. Dynamic Corp., 113 Carlson Rd., Rochester 3, N. Y.
Data processing equipment; amplifiers, relays, switches

Stromberg Time Corp., 135 S. Main St., Thomaston, Conn.
Timing devices and time clocks

Stromes Systems, Inc., 111 East 108th St., New York 29, N. Y.
Ovens, dryers and furnaces for testing, annealing, preheating, aging, sintering, moisture determination, etc.

Struthers-Dunn, Inc., Lambs Rd., Pitman, N. J.
Relays; timing devices

Representative—SE N. Y., No. N. J., SW Conn.
Kahant Associates
11 Park Place, New York 7, N. Y.
Cortlandt 7-5326

Studebaker Hydraulic Products Co., 1733 N. 33rd Ave., Melrose Park, Ill.
Laboratory presses

Stupakoff, See Carborundum Co., Refractories Div.

Sturdy Tool & Gage Co., 14520 Schaefer Highway, Detroit 27, Mich.
Precision tools and dimensional gages; torque gages; pressure and vacuum gages

Sturtevant Co., P. A., Addison, Ill.
Torque measuring equipment
(See advertisement on page 225)

Stylograph Corp., 205 W. Main St., Rochester 4, N. Y.
Wax-coated recording paper; charts, stylus; teletyper paper for multiple copies; paper for copies without carbon
(See advertisement on page 54)

Suffolk Products Corp., Woodbine and Scudder Aves., Northport, L. I., N. Y.
Fixed, rotating antennae; mechanical assemblies, servomechanisms; tube shields; precision machined parts; wired chassis; chassis frames; panels

Sullivan Varnish Co., 410 N. Hart St., Chicago 22, Ill.

Summers Gyroscope Co., 2328 Broadway, Santa Monica, Calif.
Automatic pilots, and gyro servos; gyroscopic flight indicating instruments

Sun Dial Corp., P. O. Box 326, Caldwell, N. J.

Sun Electric Corp., 6323 No. Avondale Ave., Chicago 31, Ill.
Electronic automotive test equipment; ground-support power source; test equipment for aircraft and guided missiles; electronic and hydraulic systems

Sun Radio & Electronics Co., Inc., 650 6th Ave., New York 11, N. Y.
Radio parts and test equipment distributor

Sunshine Scientific Instrument, 1810 Grant Ave., Philadelphia 15, Pa.
Testing, measuring instruments

Sunstrand Machine Tool Co., Sunstrand Hydraulic Div., 2210 Harrison Ave., Rockford, Ill.

Super Cut Inc., 3418 N. Knox Ave., Chicago 41, Ill.

Superdraulic Corp., U. S. Truck Rt. 27, Somerset, Kentucky
Hydraulic pumps; cylinders; valves; and remote control equipment

Superex Electronics Corp., 4 Radford Place, Yonkers, N. Y.
Single & double earphones; subminiature encapsulated inductances; miniature ferrite-core components for transistorized and printed circuits; inductors

Superior Air Products Co., 132 Malvern St., Newark 5, N. J.
Burettes

Superior Electric Co., 83 Laurel St., Bristol, Conn.
Variable transformers; voltage regulators; power supplies; 5-way binding posts

Superior Flux & Manufacturing Co., 1536 St. Clair Ave., Cleveland 14, Ohio
Fluxes for welding, brazing and soldering

Superior Meter Co., Inc., 19 West 50th St., New York 20, N. Y.
Gas meters and appliances

Superior Steatite & Ceramic Corp., 85 W. Forest Ave., Englewood, N. J.

Superior Tube Co., P. O. Box 191, Norristown, Pa.
Fine tubing

Supreme Inc., Greenwood, Miss.
Radio testing equipment; tube testers; set testers; analyzers; test oscillators; oscilloscopes; dynamic instruments

Surface Checking Gage Co., 5880 Hollywood Blvd., Hollywood 28, Calif.
Surface roughness standards and comparators

Surface Combustion Corp., 2375 Dorr Ave., Toledo 1, Ohio
Heat treat furnaces

Surface Finishes, Inc., 12 Official Rd., Addison, Ill.
Optical flats

Surprenant Manufacturing Co., Clinton, Mass.
Plastic tubing and wire

Surty Mfg. Co., Inc., 4139 W. Kinzie St., Chicago 24, Ill.
Magnifiers

Suter, Alfred, 200 Fifth Ave., New York 10, N. Y.
Testing apparatus for textiles and metals

Suverkrop Instruments, Box 436, Bakersfield, Calif.
Drafting and surveying instruments

Swain Electric Co., 111 York St., Hanover, Penna.
Switchboards; control panels for diesel-generator sets; automatic controls

Swanson Engineering & Mfg. Co., 1133 E. Redondo Blvd., Inglewood 3, Calif.
Industrial control systems; prefabricated control centers; graphic and conventional panels

Swartwout Co., 18511 Euclid Ave., Cleveland 12, Ohio
Electronics process control systems and components

Swedish Gage Co. of America, 10641 Haggerty Ave., Dearborn 1, Mich.
Dimensional gages

Sweets Co., Martin, 114 S. 1st St., Louisville 2, Ky.
Medical instruments; paper testing equipment; plastic blending equipment

Swieco, Inc., 1512 E. Lancaster, Fort Worth 3, Texas
Temperature indicators and controllers

Swift & Anderson Inc., 952 Dorchester Ave., Boston 25, Mass.
Weather instruments; binoculars; magnifiers

Swiss American Jewel Bearings Co., 32-30-58th St., Woodside, L. I., N. Y.
Jewel bearings
(See advertisement on page 110)

Swiss Jewel Co., 225 Lafayette Bldg., Philadelphia 6, Pa.
Sapphire and ruby jewel bearings

Swissomatic Products, 1818 Stanford St., Santa Monica, Calif.
Precision instrument parts

Switchcraft Inc., 555 N. Elston Ave., Chicago 30, Ill.
Plugs and jacks; adapters; switches; microphone and phono connectors; cable assemblies; audio mixers

Switzer Bros., Inc., 4732 St. Clair Ave., Cleveland 3, Ohio
Daylight and ultraviolet paints, printing inks, fabrics, etc.; ultraviolet light sources

Sylvania Electric Products, Inc., 1740 Broadway, New York 19, N. Y.
Electronic instruments

Sylvania Electric Products, Inc., Parts Division, 12 2nd Ave., Warren, Pa.
Wire products

Sylvania Electric Products, Inc., Semiconductor Div., 100 First Ave., Waltham 54, Mass.

Authorized Distributor
Pioneer Electronic Supply Corp.,
2115 Prospect Ave., Cleveland 15, Ohio
SUperior 1-9410

Sylvania Electronic Systems, Div. of Sylvania Electric Products Inc., 100 First Ave., Waltham, Mass.
Ground aviation instruments; R-F and I-F coils

Synchro-Start Products, Inc., 8151 N. Ridgeway Ave., Skokie, Ill.
Safety control sets with visual and audible alarms; speed sensitive switches; solenoids

Synthane Corp., 5 River Rd., Oaks, Pa.
Laminated plastic products

Synthetic Gems & Jewels, Inc., Notre Dame St., Westfield, Mass.

Syntorque Inc., 601 W. 26th St., New York 1, N. Y.
Electric motors and generators

Syntron Co., Homer City, Pa.
Metallic dry cell selenium rectifiers; vibrating feeders; hopper feeds; battery chargers; a-c to d-c power conversion units

System Analyzer Corp., 700 W. State St., Nokomis, Ill.
A-c network analyzer; phase converters

Systems Div., Beckman Instrs. Inc., 325 Muller Ave., Anaheim, Calif.
Special-purpose computers; industrial systems for measuring, recording and control

Systematics, Inc., 60 East 42nd St., New York 17, N. Y.
Computers; punched tape-to-card converters; integrated data processing equipment

Systron Corp., 950 Galindo St., Concord, Calif.
Data handling, data logging systems; digital counters converters

Representative—Texas, Okla., Ark., La.
Arnold Barnes Co.
3603 Lemon Ave., Dallas 19, Texas LA-6-8735
3913 East 2nd Place, Tulsa 12, Okla. MA-6-7707

T

T. A. Mfg. Co., Instrument Case Div., 4607 Alger St., Los Angeles 39, Calif.
Brackets; clamps; shims; etc.; metal instrument cases for electronic equipment

TAB (Technical Apparatus Builders), 109 Liberty St., New York 6, N. Y.
Power supplies; electrical and electronic components
(See advertisement on page 140)

Taber Instrument Corp., 111 Goundry St., North Tonawanda, N. Y.
Pressure transducers; transistor amplifiers; testers for stiffness, abrasion, and scratch resistance

Tablet & Ticket Co., 1019-1021 W. Adams St., Chicago 7, Ill.

Taft-Pierce Mfg. Co., 30 Mechanic Ave., Woonsocket, R. I.
Inspection and gaging equipment; surface grinders; control systems; sorters

Talboys Instrument Corp., 13 Ackerman Ave., Emerson, N. J.
Stirrers and accessories; special laboratory apparatus

Taller & Cooper, Inc., Div. of American Electronics Inc., 75 Front St., Brooklyn 1, N. Y.
Wind tunnel instruments; panel boards, water works insts., counters, computers

Tally Register, 5300 14th N. W., Seattle 7, Wash.
Digital data processing systems; high-speed X-Y plotters; pulse-width-to-digital converter

Tammen & Denison, 4751 No. Olcott Ave., Chicago 31, Ill.
Consultants; design, build special-purpose analog computers; computing service

Tamms Industries Inc., 228 N. LaSalle St., Chicago 1, Ill.
Pyrometers

Tansitor Electronics, Inc., West Rd., Bennington, Vt.
Tantalum electrolytic capacitors

Taper Micrometer Corp., 100 Grove St., Worcester, Mass.
Dimensional gaging equipment; taper gages

Tarc Electronics Inc., 48 Urban Ave., Westbury, L. I., N. Y.

Task Corp., 1009 E. Vermont Ave., Anaheim, Calif.
Aero-physics research equipment; tunnel and flight-test instrumentation; induction motors; commercial Baldwin strain-gage appln.

Tatnall Measuring Systems Co., P. O. Box 245, Phoenixville, Penna.
Testing machines; stress analysis equipment; load and pressure transducers

Taurus Corp., 8 Coryell St., Lambertville, N. J.
Teflon-insulated standoff and feed thru terminals; static punched-card readers

Taylor & Co., W. A., 7300 York Rd., Baltimore 4, Maryland
Equipment for pH and chlorine control, control of phosphates in boiler water and for water analysis

Taylor Dynamometer & Machine Co., 6411 River Parkway, Milwaukee 13, Wis.
Hydraulic dynamometers; balancing machines; sensitive drilling machines; precision drills

Taylor Electric, Inc., 15412 Dale St., Detroit 23, Mich.
Wiring duct

Taylor-Emmett Controls, Inc., P. O. Box 728, Akron, 9, Ohio

Taylor Forge & Pipe Works, Inc., P. O. Box 485, Chicago 90, Ill.
Orifice flanges

Taylor Instrument Cos., 95 Ames St., Rochester 1, N. Y.
Indicating, recording and controlling instruments for temperature, humidity, pressure, rate of flow, and liquid level

Taylor Pivot Co., 1836 W. Jefferson St., Springfield, Ill.
Instruments pivots

Taylor Tubes, Inc., 6 N. Michigan Ave., Chicago 1, Ill.
Transmitting tubes; vacuum, gas & mercury-vapor rectifiers and thyratrons

Tech Labs., Inc., Bergen Blvd., Palisades Park, N. J.

Technic, Inc., 39 Snow St., Providence 1, R. I.

Technical Apparatus Builders, see TAB

Technical Appliance Corp., Sherburne, N. Y.
Antennas and allied equipment

Technical Associates, 140 W. Providencia Ave., Burbank, Calif.
Instruments for nuclear research including monitors; scalers; survey meters; lead shields; counters; Geiger and scintillation counters; film badge service
(See advertisement on page 158)

Technical Charts, Inc., 189 Van Rennselaer St., Buffalo 10, N. Y.
Circular, strip and rectangular charts; electro-sensitive charts; computer plotting paper
(See advertisement on page 54)

Technical Electronics Corp., 4060 Ince Blvd., Culver City, Calif.
Synchronous motors for tape recorders and similar precision equipment; system analyzers for comparison against a known standard; plug-in housings for electronic assemblies

Technical Equipment Co., P. O. Box 538, Danville, Calif.
Temperature, flow, pressure instrumentation; laboratory testing apparatus

Technical Material Corp., 700 Fenimore Rd., Mamaroneck, N. Y.
Communications systems

Technical Measurement Corp., 140 State St., New Haven, Conn.
Electrical and electronic instrumentation

Technical Oil Tool Corp., 1057 N. LaBrea Ave., Los Angeles 38, Calif.
Oil field survey equipment; gear trains; ordnance fuze mechanisms, timers, tachometers

Technical Paper Co., Inc., 2430 Linden Ave., E. Linden, N. J.
Conversion and development of technical papers for chart use in graphic recording instrument fields; slitting, printing by rotary process, punching, rerolling, etc.

Technical Products Co., 19 North Dunlap, Memphis 1, Tenn.
Laboratory supply house

Technical Products Co., Inst. Div., 6670 Lexington Ave., Hollywood 38, Calif.
Distributors of wave analyzers and graphic recording instruments

Technical Soldering Co., 11614 W. Olympic Blvd. Los Angeles 64, Calif.
Hermetic seals, metalized instrument windows, specialty soldering, copper brazing

Technicians Supply Co., P. O. Box 2337, San Antonio 6, Texas

Technicraft Co., 6222 Ridge Ave., Philadelphia 28, Pa.
Counters

Technicraft Laboratories, Inc., Thomaston-Waterbury Road, Thomaston, Conn.

Techniflex Corp., 55 Jersey Ave., Port Jervis, N. Y.
Level indicators and controllers; motor-operated valves, positioners, etc.

Technique Associates, Inc., P. O. Box 93, Indianapolis 6, Ind.
Pyrometers and pyrometric testing equipment

Techniques, Inc., 52 Jackson Ave., Hackensack, N. J.
Printed circuits

Technitrol Engineering Co., 1952 E. Allegheny Ave., Philadelphia, 34, Pa.
Pulse transformers; delay lines; custom electronic data processing systems; medical test insts.

Techno Instrument Co., 6666 Lexington Ave., Los Angeles 38, Calif.
Electrical and electronic instruments

Technograph Printed Electronics, Inc., 920 Northwest Blvd., Winston-Salem, N. C.
Printed circuits; strain gages

Technology Instr. Div., Acton Labs., 531 Main St. Acton, Mass.
Special audio equipment

Technology Instruments Corp. of Calif., 7229 Atoll St., North Hollywood, Calif.
Potentiometers, transducers, magnetic clutches, accelerometers

Tech-Reps—Northern Calif., Western Nev.
Long & Associates
1210 Canterbury Dr., Burlingame, Calif.
DIamond 3-8537

Techron Co., The, 254-256 Friend St., Boston 14, Mass.
Printed circuits

Teichert Engineering Co., 217-09 Merrick Blvd. Springfield Gardens, L. I., N. Y.
Glass engraving and blowing machinery

Tejax Engineering Corp., 180 Weeden St., P. O. Box 348, Pawtucket, R. I.
Valve-position-indicating handwheels

Tektronix, Inc., P. O. Box 831, Portland 7, Ore.
Cathode-ray oscilloscopes and video test equipment

Telechrome Mfg. Corp. 28 Ranick Drive, Amityville, L. I., N. Y.
Photoelectric color comparators; Z-angle meters

Telechron Dept., General Electric Co., Ashland, Mass.
Instrument drives; fractional-hp motors

Telecomputing Corp., Data Instrument Div., 12838 Saticoy St., N. Hollywood, Calif.
Automatic data reading, recording and plotting equipment; card programmed calculators; autograph readers, digital plotters

Tele-Dynamics Inc., 5000 Parkside Ave., Philadelphia 31, Pa.
Telemetering systems

Check Tensions
in Yarns, Wires, Rubber
Quick Trigger Action
SAXL TENSION METER
Tensitron, Inc., Harvard, Mass.

For more information circle 369 on inquiry card.

Teleflex, Inc., P. O. Box 218, North Wales, Penna.
Control shafts, linkages and cables

Telemeter Magnetics, Inc., 2138 Westwood Blvd., Los Angeles 25, Calif.
Ferrite cores; data processing systems; input-output equipment; large-scale memory systems

Teletronics Laboratory Inc., 54 Kinkel St., Waterbury, L. I., N. Y.
Precision electronic test equipment for laboratory and production use

Teletype Corp., 4100 Fullerton Ave., Chicago 39, Ill.
Printed communication equipment

Televiso Corporation, 1415 Golf Road, Des Plaines, Ill.
Radio and electronic parts

Televiso Products Inc., 7466 Irving Park Rd., Chicago 34, Ill.
Electronic products; custom built equipment

Telewave Laboratories Inc., see Polarad Electronics Co.

Telex Inc., E-A Div., Telex Park, St. Paul 1, Minn.
Decade boxes; slip rings

Tel-Instrument Electronics Corp., 728 Garden St. Carlstadt, N. J.
Voltage regulators; electronic power supplies; vibration calibrators

Tell-Tronics Products, Inc., P. O. Box 495, Memphis 1, Tenn.
Temperature controls, indicators and testers

Teller Co., Hansen Ave., Butler, Pa.
Stepping motor, tape-controlled positioners

Telonic Industries, 73 N. 2nd Ave., Beech Grove Indiana
Sweep-signal and marker generator

Tempel Manufacturing Co., 1939 Bryn Mawr Ave. Chicago 26, Ill.
Magnetic steel laminations

Temperature Engineering Corp., U. S. Highway #130 Riverton, N. J.
Temperature processing equipment and accessories for research, industry, communications and transportation

TempFlex Co., 202 N. Central Ave., Compton, Calif.
Expansion joints

Pittsburgh Area Representative
W. A. Stoeltzing, Inc.
940 Western Ave., Pittsburgh 33, Pa.
ALlegheny 1-9400

Tempil Corp., 132 W. 22 St., New York 11, N. Y.
Thermoscopic paint and thermometer sticks

Tempo Instrument Inc., 240 Old Country Rd., Hicksville, L. I., N. Y.
Transistorized time delay relays

Ten Bosch Inc., M., 80 Wheeler Ave., Pleasantville N. Y.

Tennant Sons & Co., C., 100 Park Ave., New York 17, N. Y.

Tennessee Eastman Corp., Kingsport, Tenn.

Tenney Engineering, Inc., 1090 Springfield Rd., Union, N. J.
Design and manufacture of complete environmental test equipment; consultant for advanced requirements in missile and aircraft testing
(See advertisement on page 25)

Tensitron, Inc., Harvard, Mass.
Wire tension meters; rotating mercury pulse switch

Tensolite Insulated Wire Co., Inc., West Main St., Tarrytown, N. Y.
Miniature wire & cable; miniature coaxial cable, magnet wire

Teplitz, Henry H., 185 N. Wabash Ave., Chicago 1, Ill.
Audio frequency equipment; laboratory standard microphones

Testa Mfg. Co., 10122 East Rush St., El Monte, Calif.
Microscopes; borescopes; optical components; assemblies; sub-assemblies; optical engineering; optical and electrical military instruments; optical inspection and measuring instruments

Testing Instruments, Inc., 242 Valley St., Dayton 4, Ohio
Electrical testing instruments for automotive equipment

Testing Machines, Inc., 72 Jerico Turnpike, Mineola, L. I., N. Y.
Physical testing machines
(See advertisement on page 193)

Tetrad Co., 62 St. Mary St., Yonkers, N. Y.
Diamond phonograph needles, diamond pivots

Texas Apparatus Co., 2300 Congress Ave., Houston 3, Texas
Control systems and panels

Texas Div., Clevite Corp., 3732 Westheimer Rd. Houston 6, Texas
Photographic and magnet recording instruments for seismic exploration

Texas Instruments Incorporated, 6000 Lemmons Ave., Dallas 9, Texas
Electrical and electronic instrumentation; optical parts and materials; transistors; magnetic and strip chart recorders; seismological instruments; recording oscillographs, telemetering equipment

Sales Offices
Houston, Texas—Jack V. Briner
3609 Buffalo Speedway, JAckson 6-1411
New York, N. Y.—Ray H. Fara
99 Park Avenue, MUrray Hill 2-7951
Camden, N. J.—C. A. Maloney, Jr.
701 Wilson Building, WOodlawn 4-4978
Chicago, Ill.—Guy W. Wilson
4104 N. Harlem, NAtional 5-8330
Hollywood 28, Calif—Don E. Roach
1741 Ivar Ave., HOllywood 2-6977

Authorized Distributor—Semiconductor Div. Only
Pioneer Electronic Supply Corp.
2115 Prospect Ave., Cleveland 15, Ohio
SUperior 1-9410

Texas Instruments, Inc., Industrial Instrumentation Div., 3609 Buffalo Speedway, Houston 6, Texas
Geophones; amplifiers; recorders; gravity meters, strip-chart rectilinear galvanometric recorders, automatic tank gaging equipment

Texas Instruments, Inc., Optics Div., 104 W. Foothill Blvd., Monrovia, Calif.

Thayer Scale & Engineering Corp., Pembroke, Mass.

Thelen Co., 7850 Woodley Ave., Van Nuys, Calif.

Thermador Electrical Mfg. Co., 2000 So. Canfield Ave., Los Angeles 22, Cal.
Transformers and magnetic components for guided missiles and radar

Thermal American Fused Quartz Co., 18-20 Salem St., Dover, N. J.
Optical and insulating parts and materials

Thermal Syndicate Ltd., 18 Salem St., Dover, N. J.
Laboratory apparatus; optical flats; gas and vapor discharge tubes; light sources: mercury vapor and ultraviolet; optical parts

Thermax Wire Corp., 304 E. 45th St., New York 17, N. Y.
Hook-up and lead wire; Teflon-insulated cable including coaxial

Thermco Instrument Corp., R. R. 5, U. S. Highway 20, LaPorte, Ind.
Industrial instrumentation; gas-analysis equipment

Thermel Inc., 9400 W. Robinson Rd., Franklin Park, Ill.
Industrial, commercial and domestic electric heating units

Thermix Corp., Greenwich, Conn.
Aircraft controls; valves, pressure and float switches for aircraft

Thermo-Couple Products Co., 729 N. Addison Ave., Villa Park, Ill.
Thermocouples; thermocouple connectors and connecter panels

Thermo Electric Co., Inc., 109 Fifth St., Saddle Brook, N. J.
Aircraft and industrial thermocouples, thermocouple wire and accessories; pyrometers, temperature controllers, indicators, recorders, monitoring systems, connector panels, resistance bulbs
(See advertisement on pages 157, 184, 190, 194, 196, 273)

Thermo Electric Manufacturing Co., 5112 Huff St., Dubuque, Iowa
Laboratory furnaces; automatic temperature controllers

Thermo Materials, Inc., 4040 Campbell Ave., Menlo Park, Calif.
Industrial ceramics, ferrites

Thermo Electric Co., Inc., Saddle Brook, N. J.
Aircraft and industrial thermocouples; thermocouple wire and accessories; pyrometers, temperature controllers, indicators, recorders, monitoring systems, connector panels, resistance bulbs

•

Telephone Numbers Of

Thermo Electric

Sales Offices

•

Attleboro, Mass.
Thermo Electric Co., Inc.
Attleboro 1-3368

Charleston 27, W. Va.
The Abbott Company
Dickens 3-1314

Charlotte 9, North Carolina
MacGuire Instrument Company
Emerson 6-3454

Chicago, Illinois
Thermo Electric Co., Inc.
Pensacola 6-3878

Cincinnati 8, Ohio
The Abbott Company
East 1-2349

Cleveland 26, Ohio
D. F. Barringer
Regent 4-3126

Columbus, Ohio
The Abbott Company
Axminster 9-4244

Dallas 6, Texas
Wright Industrial Products
Taylor 4-2571

Dayton, Ohio
The Abbott Company
Baldwin 8-7262

Denver 9, Colorado
James B. Drummond Company
Spruce 7-6748

Detroit, Mich
H. H. Barnum Company
Kenwood 1-7504

Houston 4, Texas
Wright Industrial Products
Jackson 3-5651

Los Angeles, Calif.
S. R. Brown Company
State 6-0105

Louisville, Ky.
The Abbott Company
Juniper 4-4713

Mobile, Alabama
Frank A. Thomas Company
Hemlock 2-0403

Philadelphia 4, Pa.
Arobone and Cline
Evergreen 2-6520

Pittsburgh 8, Pa.
G. L. Clapper
Churchill 1-1200

Saddle Brook, N. J.
Thermo Electric Co., Inc.
Hubbard 9-5800

St. Louis 22, Mo.
E. B. Miller Co
Yorktown 6-8250

San Francisco 3, Calif.
California Instrument Company
Underhill 3-0350

Seattle 2, Wash.
G. O. Carson Company
East 4-8347

CANADA

Montreal 29, Que.
Aeromotive Engineering Products
Elwood 9602

North Vancouver, British Columbia
Northern Columbia Process Equipment Ltd
Yukon 7-5711

Toronto, Ont.
Thermo Electric (Canada) Ltd
Butler 6-2072

Winnipeg, Manitoba
Power & Mine Supply Co. Ltd
Whitehall 3-3531

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TIFFEN MARKETING CO.
INDUSTRIAL DIVISION
72 Jane St., Roslyn Heights, L. I., N.Y.

For more information circle 393 on inquiry card.

Thermo Nuclear Wire Indust., 112-11 Northern Blvd., Corona 68, L. I., N. Y.

Thermo-Products Co., Inc., 3727 N. Palmer St., Milwaukee 12, Wis.
Thermocouples, base and noble metals, standard and special assemblies; automatic thermocouple butt welders

(See advertisement on page 196)

Thermometer Corp. of America, 567 E. Pleasant St., Springfield, Ohio
Temperature indicators; compasses

Thermosen, Inc., 375 Fairfield Ave., Stamford, Conn.
Vacuum tubes

Thomas Co., Arthur, H., West Washington Square, Philadelphia 5, Pa.
Dealers, retail-wholesale-export, in laboratory apparatus & reagents for laboratories of chemistry and biology

Thomas & Betts Co., Inc., 36 Butler St., Elizabeth N. J.
Terminals and connectors; coaxial cable connectors

Thomas & Skinner, Inc., 1118 E. 23rd St., Indianapolis 7, Ind.
Permanent magnets; electrical transformer and motor laminations

Thomaston Tool & Die Co., Bridge St., Thomaston Conn.

Thompson Co., A. J., Route 1, Box 812, Florissant, Mo.
Sub-miniature precision electro-magnetic clutches and brakes

Thompson Balance Co., 802 E. 18 Ave., Denver 5, Colo
Fine balances and weights

Thompson Clock Co., H. C., 38 Federal St., Bristol, Conn.
Electric stop clocks and interval timers

Thompson Products, Inc., Electronics Div., 2196 Clarkwood, Cleveland 3, Ohio
Coaxial, waveguide, and rotary selector switches, microwave components; magnetic amplifiers; discriminators; load sense units; missile and airplane controls, auxiliary controls

Thompson-Ramo-Wooldridge Prods. Co., P.O. Box 45067, Airport Station, Los Angeles 45, Calif.
Digital control computers; instrumentation and data-handling systems

Thomson Industries, Inc., 1029 Plandome Rd., Manhasset, L. I., N. Y.
Bushings; nylon bearings

Thor Ceramics, Inc., 225 Belleville Ave., Bloomfield New Jersey
Ceramic and epoxy insulators

Thordarson-Meissner Mfg. Div., Maguire Industries Inc., 7th & Bellmont, Mt. Carmel, Ill.
Electrical and electronic instrumentation; components

Threadmiller Corp., 44 W. 44 St., New York 36 N. Y.
Thread-cutting tools

Three Point Industries, 3767 N. Racine Ave., Chicago 13, Ill
Pipe gages

Thwing-Albert Instrument Co., 5323 Pulaski Ave., Philadelphia 44, Pa.
Pyrometers; papers testing instruments; portable pH meters; general testing instruments and machines

Tiffen Marketing Co., 71 Jane St., Roslyn Heights, L. I., N. Y.
Lens mounts, optical filters, reticles

(See advertisement on page 273)

Tigerman Engineering Co., 4332 N. Western Ave., Chicago 18, Ill.
Alarm annunciator systems; switches; signals

(See advertisement on page 125)

Pittsburgh Area Representative
W. A. Stoeltzing, Inc.
940 Western Ave., Pittsburgh 33, Pa
ALlegheny 1-9400

Timely Instrument & Controls Co., 1645 W. 135th St., Gardena, Calif.
Magnetic servo amplifiers; miniature power type voltage references and supplies; voltage regulators

Times Facsimile Corp., 540 W. 58 St., New York 19, N. Y.
High speed recording and communications equipment; synchronous motors; audio frequency fork oscillators

Timetrol Co., 1715 Wedel Ave., Rockford, Ill
Automatic timers

Tinius Olsen, see Olsen

Tinnerman Products Inc., Dept. 12, Box 6688, Cleveland 1, Ohio
Fasteners

Tinsley Laboratories, Inc., 2526 Grove St., Berkeley 4, Calif.
Precision optics; optical instruments and accessories; optical designing and engineering

(See advertisement on page 130)

Ti-Pi Co., 1000 Broadway, Kansas City 6, Mo.
Thickness gages

Tipp-Tronic, Inc., 4th & Franklin Street, Tipp City Ohio
Electrical temperature controls

Titan Metal Mfg. Co., Bellefonte, Pa.
Pressure die castings; aluminum forgings; brass forgings, wire, rods

Titeflex, Inc., 500 Frelinghuysen Ave., Newark 5, N. J.
Metal bellows

Tobe Deutschmann Corp., Norwood, Mass.
Electrical and electronic instruments and components

Todd Scientific Co., 160 N. State Rd., Springfield, Pa
Laboratory fractionating equipment; spectroscopes; pressure and vacuum controllers and gages; vacuum pumps

Toledo Scale Co., 1079 Telegraph Rd., Toledo 12, Ohio
Automatic Scale for weighing, counting, check-weighing, compounding, force-measuring, weight-printing and weight-recording; and special devices for testing, classifying and standardizing

Topflight Tape Co., 160 E. 9th Ave., North York, Penna.
Printed pressure-sensitive tape for identification and labeling

Topp Industries, Inc., 8907 Wilshire Blvd., Beverly Hills, Calif.
Precision potentiometers; angle-of-attack sensors and computing systems; intervalometers; portable wind tunnels; magnetics; heli-coil thread inserts

Tork Time Controls, Inc., 1 Grove St., Mt. Vernon, N. Y.
Clocks; timers; time controllers

Torq Engineered Products Inc., 50 W. Monroe St., Bedford, Ohio
Centrifugal switches; speed indicators, regulators

Torrance Glass and Color Works, 22922 S. Normandie Ave., Torrance, Calif.
Glass products; metal to glass seals; high temperature furnaces

Torrington Co., 557 Field St., Torrington, Conn
Precision metal parts, metal forming machinery, cold-headed fasteners

Torsion Balance Co., Monhegan Ave., Clifton, N. J
Analytical and laboratory balances and weights; micro hardness testers; combination hardness testers; subminiature toggle switches

Torwico Electronics, Inc., 1090 Morris Ave., Union N. J.
Magnetic amplifiers; chokes; transformers

Tracerlab, Inc., 1601 Trapelo Rd., Waltham 54, Mass.
Radioactivity detectors; continuous thickness gages, nucleonics instrumentation; isotopes

Tracktest Equipment Co., Box 499, Franklin 1, Mich
Speed-time recorders; fifth-wheel speedometers; odometers

Trad Electronics Corp., 1001 First Ave., Asbury Park, N. J.
Attenuators; oscilloscopes; signal generators; closed-circuit TV projectors

Traid Corp., 17136 Ventura Blvd., Encino, Calif.
Missle-scoring systems, photographic and optical systems, synchronous cameras

Transformer Engineers, 325 N. Halstead St., Pasadena, Calif.
Transformers; reactors; wave filters; saturable core components

Transformers, Inc. 200 Stage Road Vestal N. Y.
Transformers; magnetic amplifiers

Trans-Gel Products, Inc., 212-40 Jamaica Ave Queens Village, N. Y.

Transistor Applications, Inc., 50 Broad St., Boston Mass.
Transistorized core PlanTesters amplifiers and control devices; short run transistorized assemblies

Transistor Devices, Inc., 730 Boulevard, Kenilworth, N. J.
Power supplies; current voltage regulators; filters

Transistor Products, Inc., 241 Crescent St., Waltham 54, Mass.
Electronic components; photoelectric devices

Transitron Electronic Corp., 168 Albion St., Wakefield, Mass.
Silicon diodes, rectifiers, regulators; germanium diodes

Trans-Sonics, Inc., P. O. Box 328, Lexington 73, Mass.
Transducers for measurement and control

Transval Engineering Corp., 10401 W. Jefferson Blvd. Culver City, Calif.
Transistorized power supplies and amplifiers; transistorized airborne communications and navigation equipment

Transvision, Inc., 460 North Ave., New Rochelle N. Y.

Trans-Weigh Co., P. O. Box 415, King of Prussia, Penna.
Continuous weighing systems; gravimetric flow-rate meters

Tranter Mfg., Inc., Lansing 4, Mich.
Platecoil heat exchangers

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W. A. Stoeltzing, Inc.
940 Western Ave., Pittsburgh 33, Pa.
ALlegheny 1-9400

Trenton Transformer Corp., P. O. Box 568-A Trenton N. J.
Instrument, regulating, and testing transformers; magnetic components

Trerice Co., H. O., 1420 W. Lafayette Blvd., Detroit 16, Mich.
Temperature and pressure instruments, steam traps

Tri-Dex Electronics, P. O. Box 1207, Lindsay, Calif.
Amplifiers; special coils; terminal boards; wired electronic assemblies

Tri-Tronics Co., 2607 St. Charles Rd. Bellwood, Ill.
Miniature photoelectric systems for counting, registry and general machine control

Triad Transformer Div., Litton Indus., Inc., 4055 Redwood Ave., Venice, Calif.
Coils; toroids; filters; reactors; hermetically sealed terminals; audio transformers; power filaments; high and low frequency isolation

Trimount Instrument Company, 3119-21 W. Lake St. Chicago 12, Ill.
Manometers; well type, sliding scale U-tube, fixed scale U-tube, inclined, absolute pressure, and service gages; draft and mercury pressure; indicating flow meters; tank level indicators

Triner Scale & Mfg. Co., 2714 W. 21st St., Chicago 8, Ill.
Scales and service

Trinity Equipment Corp., Cortland, N. Y.
Single and double-bore thermowells; thermocouple assemblies

Trio Laboratories, Inc., Plainview, L. I., N. Y.
Miniature electronic instruments for panel-mounting power supplies, phase meters, nullmeters, multi-meters
(See advertisement on page 220)

Triplett Electrical Instrument Co., Harmon Rd., Bluffton, Ohio
Electrical measuring instruments, panel and portable types; electrical test equipment

Triumph Mfg. Co., 1829 So. 55th Ave., Chicago 50, Ill.
Radio test instruments

Troemner, Henry, 22nd & Master Sts., Philadelphia 21, Pa.
Balances

Trott Electronics, Inc., 412 Smith St., Rochester 6, N. Y.
Custom-made electronic devices

True Flo Valve Div., Mystic Machine Co., Inc., Bow St., Everett 49, Mass.
Check, flow control and pressure-compensated valves

Truck Scale & Research Corp., P. O. Box 1047, St. Petersburg, Fla.
Hydraulic testing machines for physical properties; screw presses

Truline Process Co., 7027 Pennsylvania Ave., St. Louis 11, Mo.

Tru-Ohm Products Div., Model Engineering & Manufacturing, Inc., 2800 Milwaukee Ave., Chicago 18, Ill.
Wire wound vitreous enamel resistors; power rheostats

Tube-Turns Plastics, Inc., 2929 Magazine St., Louisville 11, Ky.
Valves; pipe fittings; custom molded parts of polyvinyl chloride

Tung-Sol Electric Inc., 95 8th Ave., Newark 4, N. J.
TV and special-purpose electron tubes; semiconductor products; signal lamps

Tungsten Contact Mfg. Co., 7311 Cottage Ave., North Bergen, N. J.

Tuttle & Co., W. H., Adrian, Mich.

Tuttle & Kift, Inc., 1823 N. Monitor Ave., Chicago 39, Ill.
Electric heating elements

U

U C Indicator Co., 624 E. Locust St., Milwaukee 12, Wis.
Liquid level gages

Uehling Instrument Co., 470 Getty Ave., Paterson 3, N. J.
Draft gages and recorders; liquid level gages and controllers; pressure and vacuum gages; recorders and controllers; manometers; barometers; gas analyzers
(See advertisement on page 280)

Uhrig Co., Joseph F., 4101-03 N. Fifth St., Philadelphia 40, Pa.
Scientific glassware

Ulanet Co., George, 413-15 Market St., Newark 5, N. J.
Thermostats; time delay relays; miniature heaters

Ultradyne Engineering Labs., Inc., P. O. Box 3308 Albuquerque, N. Mex.
Electromechanical transducers

Ultrasonic Corp., 640 Memorial Dr., Cambridge 42, Mass.
Computers, accessories, components; data processing and remote control equipment; microwave and ultrasonic equipment; electronic instrumentation

Ultra-Violet Products, Inc., 5114 Walnut Grove Ave. San Gabriel, Calif.
Ultraviolet lamps for flourescence analysis in laboratory, research, chromatography, industrial testing, leak and flow, sanitation detection

Underwood Corp., 1 Park Ave., New York 16, N. Y.

Unertl Optical Co., John, 3551-3555 East St., Pittsburgh 14, Pa.
Optical instruments
(See advertisement on page 130)

Ungar Electric Tools Inc., 4101 Redwood Ave., Los Angeles 66, Calif.
Electric soldering irons with interchangeable heating units and tiplets

Uniflow Valve Corp., 19 Quine St., Cranford, N. J.
Automatic control valves; valve positioners

Uniform Tubes, Inc., Collegeville 2, Pa.
Precision tubes of all metals

Unimax Switch Div., W. L. Maxson Corp., Ives Rd. Wallingford, Conn.
Switches

Union Carbide Chemicals Co., 30 E. 42nd St., New York 17, N. Y.

Union Switch & Signal Div., Westinghouse Air Brake Co., Pittsburgh 18, Pa.
Automation and remote control equipment for railways, pipelines, steel mills, mining industry; electronic flight simulators; missile ground handling equipment; air traffic control systems

Unistrut Products Co., 933 W. Washington Blvd. Chicago 7, Ill.
Racks; fluorescent fixture supports

Unit Process Assemblies, Inc., 61 E. 4th St., New York 3, N. Y.
Thickness testers; periodic polarity reversers for plating application

United-Carr Fastener Corp., 31 Ames St., Cambridge Mass.

United Control Corp., 4540 Union Bay Place, Seattle 5, Wash.
Electronic control systems for aircraft and guided missiles, test equipment

United Electric Co., Engrg. Div., 3938 W. Roosevelt Rd., Chicago 24, Ill.
Electrical indicating instruments

United Electric Controls Co., 85 School St., Watertown 72, Mass.
Temperature, pressure and vacuum controls

Midwestern Representative
Sherertz-Henderson Co.
5707 W. Lake St., Chicago 44, Ill.
COlumbus 1-1032

United Electronics Co., 42 Spring St., Newark 2, N. J.
Vacuum capacitors and vacuum tubes

United Engineers, Inc., 824 E. Sixth St., Tulsa 20, Okla.
Industrial measurement and control equipment; radioactivity instrumentation

United Hydraulics, Inc., 100 Terrell St., Dayton 7, Ohio
Process control systems, control valves and positioners; servomechanisms; amplifiers
(See advertisement on pages 176, 217)

United Instrument Co., 574 President St., Brooklyn 15, N. Y.
Pressure and temperature instrumentation

United Lens Co., 259 Worcester St. Southbridge, Mass.
Optical instrument blanks ready to grind

United Mfg. Co. Div., W. L. Maxson Corp., 41 Haig St., Hamden 14, Conn.
Aircraft test equipment

United Optical Mfg. Corp., 202-4 E. 19th St., New York 3, N. Y.
Electrical measuring instruments

United Scientific Co., Unitron Instrument Div., 204 Milk St., Boston 9, Mass.
Microscopes; including metallurgical, stereoscopic laboratory, astronomical telescopes
(See advertisement on page 122)

United Shoe Machinery Corp., 140 Federal St. Boston, Mass.
Automatic wiring machines, high-precision contract machining

United States Blue Print Paper Co., 111 N. Wacker Dr., Chicago 6, Ill.
Surveying instruments

U. S. Components, Inc., 454 E. 148th St., New York 55, N. Y.
Connectors

U. S. Controls Co., 85 School St., Watertown 72, Mass.
Temperature, pressure, vacuum controls

U. S. Electrical Motors, Inc., P. O. Box 2058, Terminal Annex, Los Angeles 54, Calif.
Speed control equipment; motors; generators

U. S. Electronic Development Corp., 3540 W. Osborn Rd., Phoenix, Ariz.
Polystyrene, mylar, teflon, tantalum capacitors; semiconductors; paper, metallized paper and metallized mylar condensers

Representative—Ohio, W. Va., W. Pa.
Sid Levin & Associates
6252 Mayfield Rd., Cleveland 24, Ohio
HIllcrest 2-8540

United States Electronics Corp., 275 Warren St. Lyndhurst, N. J.
Electrical filters, chokes and transformers; solenoids

U. S. Expansion Bolt Co., Standard Div., York, Pa.
Dimensional gages

U. S. Gasket Co., 600 N. 10th St., Camden 1, N. J.

United States Gauge Div., American Machine & Metals, Inc., Sellersville, Pa.
Indicating and recording pressure gages and thermometers

Pittsburgh Representative
Lappe Supply Co.
85 S. 24th St., Pittsburgh 3, Pa.
Hubbard 1-0600

U. S. Gear Corp., 81 Bay State Rd., Wakefield, Mass.
Fine-pitch precision gears

Metropolitan N. Y. Representative
R. S. Christie & Co.
175 Fifth Ave., New York 10, N. Y.
GRamercy 7-4226

California Representative
Luscombe Engineering Co.
1129 S. Fair Oaks, Pasadena, Calif. RY-1-3386
120 North "B" St., San Mateo, Calif. DI-2-7057

United States Instrument Corp., P. O. Box 33 Charlottesville, Va.
Voice-powered telephone equipment

United States Radium Corp., Morristown, N. J.
Screened, lithographed, etched, photo-reproduced instrument dials, panels, nameplates; edge lighted plastic panels; TV phosphors; radioactive products; X-ray screens

U. S. Relay Co., 717 N. Coney Ave., Azusa, Calif.
Relays; solenoid contactors; packaged electronic systems

United States Rubber Co., 1230 Ave. of the Americans, New York 20, N. Y.

U. S. Scientific Laboratories, 1394 Flatbush Ave., Brooklyn 10, N. Y.
Analytical reagents, stains; laboratory detergents

National Representative
U. S. Scientific Supply Co.
1394 Flatbush Ave., Brooklyn 10, N. Y.
GEdney 4-4500, 4501, ULster 9-4015

U. S. Stoneware Co., P. O. Box 350, Akron 9, Ohio
High alumina ceramic shapes; ceramic-to-metal seals

United States Testing Co., Inc., 1415 Park Ave., Hoboken, N. J.
Testing machines and instruments; accessory equipment

United States Time Corp., Gyro Div., 346 Tejon Pl., Palos Verdes Estates, Calif.
Gyroscopes

United Transformer Corp., 150 Varick St., New York 13, N. Y.
Wave filters; high Q coils; magnetic amplifiers; transformers; reactors

Unitek Corp., see Weldmatic Div.

Unitronics, Inc., 472 Paul Ave., St. Louis, Mo.
Light integrators; photoelectric controls

Universal Aviation Equipment, Inc., 362 Fifth Ave., New York 1, N. Y.
Testing machines and instruments

Universal Blank Co., Inc., 79 North Rd., Southbridge, Mass.

Universal Dynamics Corp., Box 9814, Arlington 9, Va.
Airdryers; humidity controllers

Universal Drafting Machine Co., 1825 E. 18th St., Cleveland, Ohio
Drafting machines.

Universal Electronics Co., 1720 22nd St., Santa Monica, Calif.
Dc regulated and unregulated power supplies, including electronically controlled supplies and magnetic-amplifier controlled supplies

(See advertisement on page 142)

Universal Engineering & Colorplate Co., Inc., 980 Elliott St., Buffalo 8, N. Y.

Universal Engraving & Color Plate Co., see Engineers Specialty Div.

Universal Mfg. Co., Inc., 1168 Grove St., Irvington 11, N. J.
Toroidal coils; contract machining

Universal Match Corp., Armament Div., Avionics Dept., 1407 Cook Ave., St. Louis 13, Mo.
Equipment for production and field testing, for missile and rocket launching, for automatic flight formation, propellant-operated valves and switches; electro-mechanical operators

Universal Metal Hose Co., 2133 S. Kedzie Ave., Chicago 23, Ill.
Flexible metal hose products

Universal Relay Corp., 42 White St., New York, N. Y.
Supply house for relays, switches and other electrical-electronic components

(See advertisement on page 164)

Universal Scientific Co., Inc., 1102 Shelby St., Vincennes, Ind.
Transformers; electrical teaching aids

Universal Transistor Products Corp., 17 Brooklyn Ave., Westbury, L. I., N. Y.
Transistorized circuits; systems; lightweight power supplies (up to 100,000 volts or 300 watts)

Universal X-Ray Products, Inc., 1140 Western Ave., Chicago 22, Ill.
High-voltage coils; x-ray timing devices; machining of castings; stamping of transformer laminations

Univis Lens Company, 401 Leo St., Dayton 1, Ohio
Optical flats; lenses; prisms

Urbana Engineering Prod. Div., Carl A. Bays & Assocs., Inc., P. O. Box 65, Urbana, Ill.

Utility Supply Co., 641 W. Lake St., Chicago 6, Ill.
Office furniture and machines; portable calculators

V

V & E Manufacturing Co., P. O. Box 950-M, Pasadena 20, Calif.
Drafting machines; drafting room instruments

Vaco Products Co., 317 E. Ontario St., Chicago, Ill.
Instrument shop tools; solderless terminals and terminal crimping tools

Vacutron, Inc., 3819 12th St., So., Arlington, Va.
Special vacuum tubes; electronic circuits and industrial control devices

Vacuum Film Products Div., Servomechanisms, Inc., 316 Washington St., El Segundo, Calif.

Vacuum Research Co., 420 Market St., San Francisco 11, Calif.
Automatic control valves; gaskets and seals, high vacuum components

Vacuum Tube Products Co., Inc., P. O. Box 810, 2020 Short St., Oceanside, Calif.
Cathode-ray tubes; thyratrons; rectifiers; vacuum-gage tubes and controls; spot and seam welders; fractional cycle timers

Valco, Inc., 1410 West St., Cincinnati 15, Ohio
Automatic valves

Valcor Engrg. Corp., 365 Carnegie Ave., Kenilworth, N. J.
Solenoid valves, pneumatic and hydraulic

(See advertisement on page 218)

Representative—No. N. J., Met. N. Y., W. Conn.
W. C. Bellis Equipment Co.
15 Exchange Pl., Jersey City 2, N. J.
Delaware 3-1100

Valley-National Corp., Clark St., Milldale, Conn.

Vallorbs Jewel Co., P. O. Box 958, Lancaster, Penna.
Swiss precision automatic screw machine products; industrial jewel bearings; sapphire styli

Valor Electronics Inc., 13214 Crenshaw Blvd., Gardena, Calif.
Miniature pulse transformers; magnetic shift register components; magnetic storage components

Valpey Crystal Corp., 1244 Highland St., Holliston, Mass.
Standard-frequency crystals; crystal-oscillator ovens

(See advertisement on pages 74, 76)

Valvair Corp., 454 Morgan Ave., Akron 11, Ohio
Control valves

Valve Pilot Corp., 230 Park Ave., New York 17, N. Y.
Locomotive speed and cut off indicators and recorders

Valv-trol Co., The, 1248 Main St., Cuyahoga Falls, Ohio
Pressure controllers; control valves; accessories

Van Keuren Co., 176 Waltham St., Watertown, Mass.
Precision measuring tools and gages

Van Norman Industries, Inc., Electron. Div., 186 Granite St., Manchester, N. H.
Electronic precision test instruments, communication equipment; sheetmetal and antenna products

Van Products Co., Inc., 5755 Swanville Rd., Erie, Pa.
Instrument air dryer-cleaners; also combination receiver-dryers.

(See advertisement on page 36)

Van Wagner Co., 89-04 113 St., Richmond Hill 18, N. Y.
Inspection devices

Vanguard Instrument Corp., 184 Casper St., Valley Stream, L. I., N. Y.
Oscilloscopes; photogrammetric instruments

Vanton Pump & Equipment Corp., Div. of Cooper Alloy Corp., 201 Sweetland Ave., Hillside 5, N. J.
Metering and proportioning pumps; plastic pipe and fittings; valves

Vapor Recovery Systems Co., 2820 N. Alameda St., Compton, Calif.
Liquid level gages, manometers, remote metering equipment; control valves

Varian Associates, 611 Hansen Way, Palo Alto, Calif.
Spectrometers; electromagnets; power supplies, graphic recorders; magnetometers; linear accelerators; klystrons

New York Metropolitan Area Rep.
RMC Associates
236 E. 75th St., New York 21, TRafalgar 9-2023
391 Grand Ave., Englewood N. J., LOwell 7-3933

Philadelphia Area Representative
The I. E. Robinson Company
7404 West Chester Pike, Upper Darby, Pa.
SHerwood 8-1294, FLanders 2-7017

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Vari-L Co., Inc., 432 Fairfield Ave., Stamford, Conn.
Variable inductors (saturable reactor type) for use in r-f and a-f sweep oscillators, frequency modulators, and afc systems

(See advertisement on page 107)

Varo Mfg. Co., 2201 Walnut St., Garland, Texas
Frequency standards; frequency meters; frequency power converters; communication equipment; regulated dc supplies

Vector Electronic Co., 1100 Flower St., Glendale 1, Calif.
Breadboards, chassis, experimenters' kits
Structures for electronic circuitry

(See advertisement on page 57)

Vectrol Engineering, Inc., P. O. Box 1089, Stamford, Conn.
Servo amplifiers; electrical control systems; phase shifters

Vectron Inc., Route 128, at Trapelo Road, Waltham 54, Mass.
Electronic and electromechanical equipment and instrumentation, including microwave spectrum analyzers, microwave test equipment, variable frequency ac power supplies, and precision components

Veeco Vacuum-Electronic Engineering Co., 86 Denton Ave., New Hyde Park, L. I., N. Y.
High-vacuum equipment

Veeder-Root Inc., Hartford 2, Conn.
Mechanical and electrical counting and computing devices for military, civilian and special counting requirements

(See advertisement on page 73)

Dealer
John T. Fuhrman, Jr.
6822 Thomas Blvd., Pittsburgh 8, Pa.
MOntrose 1-3838

Velan Valve Corp., 37 S. River, Plattsburg, N. Y.
High pressure globe, angle, gate valves

Pittsburgh Area Representative
W. A. Stoeltzing, Inc.
940 Western Ave., Pittsburgh 33, Pa.
ALlegheny 1-9400

Verdell Instrument Sales Co., P. O. Box 212, Burbank, Calif.
Vibrating-reed "pocket" tachometers.

(See advertisement on page 275)

Versa Products Co., Inc., 249 Scholes St., Brooklyn 6, N. Y.
Motorized valves

Vibra Shock Corp., 5232 River Rd., Washington 16, D. C.
Vibration and acceleration instrumentation

Vibration Measurement Engineers, 725 Oakton St., Evanston, Ill.
Seismographs

Vibration Mountings, Inc., 98-13 50th Ave., Corona 68, L. I., N. Y.
Vibration control mountings and materials

Vibration Research Labs., Inc., 58 Marbledale Rd., Tuckahoe, N. Y.

Vibro-Ceramics Corp., 212 Durham Ave., Metuchen, N. J.

Vickers, Inc., 1400 Oakman Blvd., Detroit 32, Mich.
Pumps and valving devices for control of power in oil-hydraulic systems

Vickers Inc., Electric Products Div., 1831 Locust St., St. Louis 3, Mo.
Amplifiers, potted circuits, control systems servos, speed reducers and brakes

Vickery-Simms, Inc., P. O. Box 67, Arlington, Texas
Flow meters; orifice fittings, flanges, plates
Pittsburgh & Buffalo Representative
M. S. Jacobs & Associates, Inc.
810 Noblestown Rd., Pittsburgh 5, Pa. WA-1-6140
1807 Elmwood Ave., Buffalo 7, N. Y. DE-3229

Victor Animatograph Corp., P. O. Box 112, Plainville Conn.
Motion picture projectors; magnetic recording attachments for projectors, micro-projectors

Victor Laboratory, J. N., 701 Lechauweki Ave., Bethlehem, Pa.
Testing instrumentation; oscillographs; scientific cameras

Victoreen Instrument Co., 5806 Hough Ave., Cleveland 3, Ohio
Encapsulated resistors; electrometer tubes; regulator tubes; reactor monitoring equipment; reactor instrumentation; personal and area dosimeters; survey meters

Victory Engineering Corp., P. O. Box 573, Springfield Rd., Union, N. J.
Analyzing; detecting and automatic control instruments; thermistors

Video Instruments Co., Inc., 3002 Pennsylvania Ave., Santa Monica, Calif.

Vidon Custom Cases, 526 S. Jackson St., **Michigan City, Ind.**
Instrument cases
(See advertisement on page 52)

Viking Copper Tube Co., 16700 St. Clair, Cleveland 10, Ohio
Seamless copper tube

Viking Industries, Inc., 21343 Roscoe Blvd., Canoga Park, Calif.
Connectors and jacks: molded plastic products: servo amplifiers

Viking Instruments Inc., 9 Sylvan St. East, Haddam Conn.
Tachometers, switches, remote control equipment

Vinco Corp., 9111 Schaefer Highway, Detroit 28, Mich
Special gages

Virginia Electronics Co., River Road & B&O R.R. Washington 16, D. C.
Communications control systems; meteorological instruments; power supplies; coils, transformers

Visco-Meter Corp., 315 Grote St., Buffalo 7, N. Y.
Viscosimeter

Vitramon, Inc., Box 544, Bridgeport 1, Conn.
Capacitors, high stability, low loss component, a laminent of porcelain and fine silver; completely insulated and with unitized lead electrode structure

Vocaline Co. of Am., Inc., Bristol Motor Div., 111 Coulter St., Old Saybrook, Conn.
Carrier communication systems; automatic-control systems; time and program controllers; relays and switches

Vogley & Lackman, 192½-196 Green St., New York, N. Y.

Voland & Sons, Inc., 32 Relyea Pl., New Rochelle N. Y.
Analytical balances & weights Communication measuring instruments

Volkers & Schaffer Mfg. Corp., Box 996, Schenectady N. Y.
Oscillographs and oscilloscopes; components

Voltron Products, 1010 Mission St., South Pasadena, Calif.
Test and indicating equipment for electrical and electronic power systems

Vought Co., 8907 Melrose St., Los Angeles 46, Calif.
Photographic data recorders, pulse and high speed; photographic data reduction & test devices

Vulcan Rubber Products, 1071 Ave. of the Americas, New York 18, N. Y.

W

W-K-M Mfg. Co., Inc., 221 Roberts St., Houston Texas

Wabash Insts. and Specialties Co., Box 194, Wabash, Indiana
Hydraulic presses; constant temperature tanks

Wabash Metal Products Co., Inc., Hydraulic Div., P. O. Box 305, Wabash, Ind.
Laboratory presses, 3 to 50 tons

WacLine, Inc., 35 So. St. Clair St., Dayton 2, Ohio
Adjustable speed ac drives; microwave components; electrical indicating instruments; galvanometers

Wade Tool Co., 49 River St., Waltham 54, Mass
Electric clutch hand turret lathes; hand screw machines; standard precision lathes; toolmakers precision lathes

Wagner & Son, Carl H., 1944 N. Albany Ave Chicago 47, Ill.
Thermometers

Wagner Co., Inc., Charles A., 4455 N. 6th St Philadelphia 40, Pa

Wakefield Industries, Inc., 5108 W. Grove St., Skokie, Ill.
Fractioning columns; pipettes, etc.

Wakmann Watch Co., Inc., 15 W. 47th St., New York 36, N. Y.
Stop watches and chronometers

Waldes Kohinoor, Inc., 47-16 Austel Place, Long Island City 1, N. Y.
Retaining rings; pliers; accessory tools; slide fasteners

Waldom Electronics, Inc., 4625 W. 53rd St., Chicago 32, Ill.
Instrument and electronic hardware

Waldorf Instrument Co., Electronics Div., Huntington Station, L. I., N. Y.
Miniaturized servo components, subsystems, and systems for navigation, plotting, data conversion, simulation, etc.

Walker & Co., Geo. T., 2218 University Ave. SE. Minneapolis 14, Minn.
Laboratory supplies

Walker Div., The, Norma-Hoffman Bearings Corp., Hamilton Ave., Stamford, Conn.
Power Supplies

Walker-Jamieson, Inc., 311 S. Western Ave., Chicago 12, Ill.
Radio and electronic components

Walkirt Co., 141 W. Hazel St., Inglewood 3, Calif.
Transistorized and vacuum-tube packaged circuitry for pulse-handling or digital-computer field

Wall Colmonoy Corp., 19345 John R. St., Detroit 3 Mich.
Brazing and welding materials

Wallace & Tiernan Inc., 25 Main St., Belleville 9, N. J.
Chemical control equipment; volumetric dry feeders, gravimetric feeders and meters; vacuum and pressure indicators; altimeters; navigational aids; chemicals; pharmaceuticals; plasticizers; fatty acids; food-handling machinery
(See advertisement on pages 121, 146, 149, 181)

Wallson Associated Inc., 35 E. Runyon St., Newark 8, N. J.
Specialized test and process equipment

Walser Automatic Timer Corp., 420 Lexington Ave New York 17, N. Y.
Timers

Waltham Horological Corp., 395 Lynnway, Lynn, Mass.
Rf coaxial cable connectors; telephone plugs and jacks

Waltham Precision Instrument Co., Inc., Waltham Mass.

Waltham Precision Tool Co., 94 Walnut Hill Rd Brookline, Mass.

Waltham Screw Co., 77 Rumford Ave., Waltham 54 Mass.

Wang Laboratories, 37 Hurley St., Cambridge 41, Mass.
Specialized computing systems; data handling systems; machine tool control systems; programmed pulse sequence generators; magnetic core devices

Ward Leonard Electric Co., 115 MacQuesten Parkway South, Mount Vernon, N. Y.
Resistors, rheostats; relays; motor starters, speed controllers; voltage regulators; electric control devices

Warner & Swasey Co., 5701 Carnegie Ave., Cleveland 3, Ohio
Telescopes

Warner & Swasey Research Corp., 34 West 33 St., New York 1, N. Y.
Automatic inspection and gaging equipment; tape programmed automatic inspection and gaging equipment; tape-controled automatic positioning systems

Warner Electric Brake and Clutch Co., Beloit, Wisc.
Electric brakes, clutches, and controls
(See advertisement of page 60)

Warren Bros. Mfg. Co., 32 Potter St., Cambridge, Mass.
High-speed centrifuges and centrifugal spin test machines; cabinets; chassis

Warren Engineering Co., Route 24, Broadway, N. J
Regulating control valves

Warren-Knight Co., 136 N. 12th St., Philadelphia 7, Pa.
Surveying instruments and equipment

Warren Mfg. Co., Inc., Littleton, Mass.
Process control systems; magnetic converters; telegraphy equipment; switchboards

Warren Wire Co., Pownal, Vermont

Warrick Co., Charles F., 1964 West 11 Mile Rd., Berkley, Mich.
Relays and auxiliary equipment for liquid level controls
(See advertisement on page 113)

Warrick, Frederick P., Rt. No. 1, W. Long Lake 6732 Dixie Highway, Clarkston, Mich.
Scientific cameras

Warwick Products Co., 1572 Riverbed Rd., Cleveland 13, Ohio
Wood cabinets and instrument cases

Water Leak Detector Co., 114 N. Third St., Columbus 15, Ohio
Water leak detectors

Water Level Controls Div., Healy-Ruff Co., 2255 University Ave., St. Paul 14, Minn.
Electric pump and pump system controllers

Waterbury Companies, Inc., P. O. Box 1032, Waterbury 20, Conn.

Waterman Engineering Co., 721 Custer Ave., Evanston., Ill.
High pressure hydraulic valves; filters, check valves, solenoid valves; pressure compensated flow regulators

Waterman Products Co., Inc., 2445 Emerald St., Philadelphia 25, Pa.
Portable oscilloscopes; cathode ray tubes; medical equipments; monitors
(See advertisement on page 27)

Waters Mfg. Inc., P. O. Box 368, South Sudbury Mass.
Precision miniature wire-wound potentiometers

Watlow Electric Manufacturing Co., 1376 Ferguson Ave., St. Louis 14, Mo

Waugh Engineering Co., 7842 Burnet Ave., Van Nuys, Calif.
Turbine-type fluid flow pickups; anemometers; tachometer generators; electronic converters for indicating or recording flow, speed, RPM
(See advertisement on page 95)

Waukee Engineering Co., 5138 N. 35th St., Milwaukee 9, Wis.
Flowmeters for industrial gases; gas air mixers; industrial washing machines

Waxon-Carboff, Inc., 8 Commercial St., Rochester 14, N. Y.
Wax coated recording chart paper, electrosensitive and spark
(See advertisement on page 54)

Wayne-George Corp., 1117 Commonwealth Ave., Boston 15, Mass.
Data-processing systems; shaft-position encoders

Weatherhead Co., 300 E. 131st St., Cleveland 8, Ohio
Air and hydraulic cylinders; fittings, rubber hose

Weatherhead Co., Fort Wayne Div., 128 W. Washington Blvd., Ft. Wayne, Ind.
Tube fittings, flexible hose; power steering and brake hose assemblies; drain and shut-off cocks

Webb Co., Jervis B., 8951 Alpine Ave., Detroit 4 Mich.

Webber Gage Co., 12904 Triskett Rd., Cleveland, 11, Ohio
Gage blocks

Webber Engineering Corp., 24 S. Keystone Ave., P. O. Box 217, Indianapolis 6, Ind.
Environmental test cabinets, simulating high and low temperatures, including pressure and humidity, industrial freezers for shrink fitting and testing

Weber Co., F., 1220 Buttonwood St., Philadelphia 23, Pa.
Drafting equipment and supplies

Weber Bros., Metal Works, 108 N. Jefferson St., Chicago 6, Ill.
Laboratory apparatus

Webster Instrument, Inc., 11856 Mississippi Ave., Los Angeles 25, Calif.
Hardness tester, force gage

Weckesser Co., 5701 N. Northwest Highway, Chicago 46, Ill.
Clamps, clips, strapping, fasteners, and threaded rod of mold nylon, Teflon

Weighing & Control Components, Inc., 206 Lincoln Ave., Hatboro, Pa.
Industrial scales

California Representative
Luscombe Engineering Co.
1129 S. Fair Oaks, Pasadena, Calif. RY-1-338
120 North "B" St., San Mateo, Calif. DI-2-7057

Pittsburgh & Buffalo Representative
M. S. Jacobs & Associates, Inc.
810 Noblestown Rd., Pittsburgh 5, Pa. WA-1-6140
1807 Elmwood Ave., Buffalo 7, N. Y. DE-322

Weinschel Engineering Co., Inc., 10503 Metropolitan Ave., Kensington, Md.
Step attenuators; coaxial attenuator pads; coaxial terminations; bolometer preamplifiers; insertion loss test sets

Weiss & Son, Inc., Albert A., 261-263 Vanderbilt Ave., Brooklyn 5, N. Y.
Industrial thermometers, mercury-in-glass, indicating for pipe line, tank mounting and portable use; plastic encased dough thermometers

(See advertisement on page 199)

Weksler Instruments Corp., 195 E. Merick Rd., Freeport, L. I., N. Y.
Instruments for indicating and recording temperature, pressure, and humidity, including mercury-in-glass and filled capillary systems

(See advertisement on page 197)

Pittsburgh Representative
Forbes-Western, Inc.
940 Western Ave., Pittsburgh 33, Pa.
Allegheny 1-9400

Welch Allyn, Inc., Skaneateles, N. Y.
Inspection lights; illuminated medical diagnostic instruments; special miniature lamps

Welch Manufacturing Co., W. M., 1515 Sedgwick St., Chicago 10, Ill.
Electrical instruments, high vacuum pumps, for science laboratories; densitometers, balances, scales, stirrers, supplies

Weldmatic Div., Unitek Corp., 380 N. Halstead, Pasadena, Calif.
Precision stored-energy spotwelders in portable, bench and console models for joining metals from 0.0003" to 0.095"

Weller Electric Corp., 601 Stone's Crossing Rd., Easton, Pa.
Soldering irons

Welwyn International, Inc., 3355 Edgecliff Terrace, Cleveland, Ohio

West Coast Elec. Mfg. Corp., 233 W. 116th Place, Los Angeles 61, Calif.
Solenoids

West Coast Electronics Co., Div., Litton Industries, Inc., 9261 W. Third St., Beverly Hills, Calif.

West & Dodge Thread Gauge Co., Inc., 6 Power House St., South Boston, Mass.
Screw thread gages

West Instrument Corp., 4363 W. Montrose Ave., Chicago 41, Ill.
Temperature controllers, indicators, recorders; accessory equipment

Westberg Mfg. Co., 144 S. Coombs St., Napa, Calif.
Speed indicators; auto and marine tachometers and service instruments

Western Coil Products Co., 969 Commercial St., Palo Alto, Calif.
Coils

Western Design & Mfg. Corp., Div. of U. S. Industries, Inc., Santa Barbara Airport, Goleta, Calif.
Control systems; power supplies; actuators; blowers; timing devices

Western Devices Inc., 600 W. Florence Ave., Inglewood, Calif.
Instrument panels, cabinets, racks, blowers and fans

(See advertisement on page 50)

Western Electro-Acoustic Lab., Inc., 11789, San Vicente Blvd., Los Angeles 49, Calif.
Acoustical instruments, measuring, recording, analytical

Western Gear Corp., Electro Products Div., Box 182, Lynwood, Calif.
Miniature rotary electrical equipment including motors up to 2 hp; converters; alternators; generators; fans and blowers

Western Lithograph Co., Westline Products Div., 600 E. 2nd St., Los Angeles 54, Calif.
Pipe and wire markers; marking tapes and fabrics

Western Radiation Lab., 1107 W. 24 St., Los Angeles 7, Calif.
Radioactivity detecting and measuring instruments; meg-megohmmeters; electron tubes

Western Rubber Co., 9th & Douglas Sts., Goshen, Ind.

Western Union Telegraph Co., 60 Hudson St., New York 13, N. Y.

Westinghouse Air Brake Co., Industrial Products Div., Wilmerding, Pa.
Pneumatic control equipment; force and positioning devices for aircraft use

Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa.
Switchboard, panel and portable measuring instruments, aircraft instruments, recorders, industrial and radio test set equipment; electric and electronic instrumentation and automation devices

(See advertisement on page 39)

Westinghouse X-ray Co., Inc., 2519 Wilkins Ave., Baltimore 3, Md.
Industrial X-ray equipment

Westline Products Div., Western Lithograph Co., 600 E. 2nd St., Los Angeles 54, Calif.
Wire markers

Weston Hydraulics Ltd., 10018 Burbank Blvd., No. Hollywood, Calif.
Pressure regulators; servomechanisms; solenoids; control valves; slide, poppet and servo valves

Weston Instruments, Div. of Daystrom, Inc., 614 Frelinghuysen Ave., Newark 12, N. J.
Switchboard, panel and portable measuring instrument; industrial and radio test equipment; light measuring instruments and photographic exposure meters; dial type industrial temperature gages; control relays and aircraft instruments; indicating recording and controlling instruments

Cleveland Representative—Sales & Service
Christie Laboratories, Inc.
616 St. Clair Ave., NE, Cleveland 14, Ohio
CHerry 1-0505

Westport Electric Co., 149 Lomita St., El Segundo, Calif.
Electronic digital counting and frequency measuring instruments

Representative—Wash., Ore., Idaho, Mont.
Burt C. Porter Company
1203 Poplar Place, Seattle, Wash.
EAst 3-8530

Westronics, Inc., 3605 McCart St., Fort Worth 10, Tex.
Special electronic electrical and electromechanical instruments; miniature recording potentiometer

Wheaton Co., R. W., 319 Mt. Pleasant Ave., Newark 4, N. J.

Wheaton Co., T. C., Millville, N. J.
Glassware

Wheatstone Corp., Foster, Ky.
Thermocouples and pyrometer tubes

Wheelabrator Corp., 1431 S. Byrkit St., Mishawaka, Ind.
Instrument air cleaners

Wheelco Instrument Div., Barber-Colman Co., 1300 Rock St., Rockford, Ill.
Process control instrumentation; alarm systems; chromatography; receiver indicators and recorders

Wheeler Electronic Corp., Subsidiary of Sperry Rand Corp., Great Neck, N. Y.
Coils; assemblies; open-frame metal encased, oil filled, fosterite, miniature series, pulse, resin cast transformers; power supplies

Wheeler Mfg. Co., C. H., 19th & Lehigh Ave., Philadelphia 32, Pa.
Nuclear components; valves

Wheelock Signals, Inc., 273 Branchport Ave., Long Branch, N. J.
Line of relays; fire alarms, code-call paging

Whiddett Co., John C., 3850 Garrett Rd., Drexel Hill, Penna.
Control systems

White Co., Inc., David, 315 W. Court St., Milwaukee 12, Wis.
Surveying instruments

White Dental Mfg. Co., S. S., 10 E. 40 St., New York 16, N. Y.

White Industrial Div., S. S., 10 E. 40th St., New York 16, N. Y.
Standard and special purpose resistors; temperature-responsive elements

White Instrument Laboratories, Box 9006, Allendale Sta., Austin 17, Texas
Filters; networks and amplifier-filters

White-Rodgers Electric Co., 1209 Cass Ave., St. Louis 6, Mo.
Furnace Controls

Whitehead & Hoag Co., 281 Sussex Ave., Newark 1, N. J.
Dial faces; code discs, number discs

Whitehead Stamping Co., 1691 W. Lafayette Blvd., Detroit 16, Mich.

Whitey Tool & Die Co., 1159 55th St., Oakland, Calif.
Metering pumps; needle valves; accessories

Whitney Blake Co., New Haven 14, Conn.

Whittaker Gryo Div., Telecomputing Corp., 16217 Lindbergh Ave., Van Nuys, Calif.
Designers and manufacturers of aircraft instruments and gyro devices

Whittington Pump & Engineering Corp., 1126 Prospect St., Indianapolis 3, Ind.
Testing machines; pressure instrumentation; vacuum pumps

Wiancko Engineering Co., P. O. Box 5278, Passadena, Calif.
Pressure, force, and acceleration pickups; complete analog and digital instrumentation systems; logging systems; custom instrumentation

(See advertisement on page 4)

Wickes Engrg. & Const. Co., 12th St. & Ferry Ave., Camden 4, N. J.
Supervisory control systems; electronic components; packaging

Wiegand Co., Edwin L., 7500 Thomas Blvd., Pittsburg 8, Pa.
Heating elements; tubing; infrared sources

Wilcolator Co., 1001 Newark Ave., Elizabeth, N. J.
Thermostats

Wild Heerbrugg Insts., Inc., Main & Covert Sts., Port Washington, N. Y.
Optical and photographic instruments; surveying instruments; instrument-shop instruments

Wilder Inc., R. S., 26 Bedford St., Waltham 54, Mass.
Microprojectors; instrument parts (custom made)

Wilder Mfg. Co., Inc., Mechanic St. & Erie R.R., Port Jervis, N. Y.
Soldering iron holders

Wilkens-Anderson Co., 4525 W. Division St., Chicago 51, Ill.
Laboratory supplies

Wilkor Products, Inc., 2882 Detroit Ave., Cleveland 13, Ohio
Fixed and variable resistors; negative temperature coefficient resistors

Will Corp., 39 Russell St., P. O. Box 1050, Rochester 3, N. Y.
Laboratory supplies and apparatus

Willey's Carbide Tool Co., 1342 W. Vernor Highway, Detroit 1, Mich.
Precision tools

Williams Apparatus Co., Inc., Herald Bldg., Watertown, N. Y.
Pulp and paper testing equipment and flue gas analysis apparatus

Williams Bros., Inc., 1125 W. Beardsley St., Elkhart, Ind.

Willams, Brown & Earle, Inc., 904-906 Chestnut St., Philadelphia 7, Pa.
Laboratory supplies

Williams Gauge Co., 1620 Pennsylvania Ave., Pittsburgh 12, Pa.
Water level gages

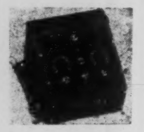
Williamson Development Co., 317 Main St., W. Concord, Mass.
Electrical and mechanical instrumentation

Wilmad Glass Co., Inc., Frankline & Flower Sts., Landisville, N. J.
Glass apparatus and components

Wilmar Mfg. Co., Inc., 1110 Truman Rd., Kansas City, Mo.
Electrical and electronic components

Wilmington Fibre Specialty Co., New Castle, Del.
Fibre products

Wilmotte, Inc., Raymond M., Box 397, Kendall Branch P. O., Miami, Fla.
Electronic gaging instruments



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(See advertisement on page 278)

Wilson Co., H. A., 2655 U. S. Route 22, Union N. J.
Thermostatic bimetals

Wilson Mechanical Instrument Div., American Chain & Cable, 230 Park Ave., New York 17, N. Y.
Hardness testers

Win Sales Co., P. O. Box 257, Forest Hills 75, N. Y.
Scientific specialty items

Winchester Electronics, Inc., Willard Rd., Norwalk Conn.
Connectors; plugs; clips; posts; jacks

Tech-Reps-Northern Calif., Western Nev.
Long & Associates
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DIamond 3-8537

Winn, Inc., J. H. 620 Washington St., Winchester, Mass.
Instrument pointers & dial hands; screw machine parts

Winslow Co., Inc., 701 Lehigh Ave., Union, N. J.
Ignition hardness test sets; aircraft engine instruments; thermocouples and instrument accessories; tachometers; vacuum gages; radio and telegraph keys; molded rubber cord sets, megohmeters, Wheatstone bridges

Winzeler Mfg. & Tool Co. 7355 W. Wilson Ave., Harwood Heights, Ill.
Precision gearing; dies; stampings

Wirt Co., 5221-27 Greene St., Philadelphia 44, Pa

Wolfe Co., Franklin C. See Parker Seal Co. Div.

Wolfe & Mann Mfg. Co., 28th & Sissons Sts., Baltimore 11, Md.
High and low voltage switchgear control and protection for generators and substations; bus runs; industrial controls; metal products; graphic panels; electronic chassis

Wollensak Optical Co., 850 Hudson Ave., Rochester 21, N. Y.
Optical instruments

Wolverine Tube Div., Calumet & Hecla Consolidated Copper Co., 1850 Guardian Bldg., Detroit 26, Mich.

Wood Counter Lab. 1525 E. 53rd St., Room 1101 Chicago 15, Ill.
Radiation detecting and measuring instruments

Woodruff & Stokes Co., Inc., 349 Lincoln St., Hingman, Mass.

Woods Hole Oceanographic Inst., Woods Hole, Mass
Oceanographic instruments

Woodworth Co., N. A., 1300 East 9 Mile Rd., Detroit Mich.
Gages for physical measurements

Worley Jewel Co., John, North Falmouth, Mass.
Sapphire and carbide bearings; orifices and wear parts in small sizes to close tolerances
(See advertisement on page 111)

Worner Electronic Devices, Rankin, Ill
Photoelectric equipment

Worthington Corp., Gamon Meter Div., 296 South St., Newark 5, N. J.
Liquid meters and instrument air compressors; pumps; motors; industrial mixers

Wroble Engineering Co., RD #2 Shellstone Rd. Amsterdam, N. Y.
Universal testing machines

Wyland, George C., Center St., Ramsey, N. J.
X-ray tubes and cameras

Y

Yardney Electric Corp., 40-50 Leonard St., New York 13, N. Y.
Silver-zinc and silver-cadmium batteries

Yarnall-Waring Company
Chestnut Hill, Philadelphia 18, Pa.
Water columns; water gages and blow-off valves for steam boilers; spray nozzles for liquids; hydraulic valves for presses

Yellow Springs Instrument Co., Inc., P. O. Box 106, Yellow Springs, Ohio
Thermistor thermometers, temperature controllers; intercommunication amplifiers; interval timers

Yonkers Lab. Supply Co., 70 Palisade Ave., Yonkers 5, N. Y.
Laboratory supplies

York Ice Machinery Corp., York, Pa.
High altitude test and calibration chambers

Young Bros. Co., 6511 Mack Ave., Detroit 7, Mich

Z

Zacharias Electronics Corp., P. O. Box 172, Livingston, N. J.
Vacuum-tube, transistor, and hybrid amplifiers

Zagora Gears, Inc., 1327 South Mint St., Charlotte 3, N. C.
Precision fine-pitch spur, helical, bevel, worm gears and worms

Zeiss, Inc., Carl, 485 Fifth Ave., New York 17, N. Y.
Importers and distributors of microscopes, polarimeters spectrophotometers, refractometers, micro-movie equipment, and scientific apparatus
(See advertisement on page 123)

Zenith Electric Co., Inc., 152 W. Walton St., Chicago 10, Ill.
Transfer, remote control, and automatic-time switches interval, automatic reset, process, and impulse timers, program clocks, reversing starters, and magnetic contactors
(See advertisement on page 202)

Zenith Optical Co., 220 Eight St., Huntington 19, W. Va.
Microscopes; lenses; optical flats

Zenith Optical Laboratory, 1940 Great Neck Rd., Copiague, L. I., N. Y.
Optical products; ultrasonic drilling and grinding
(See advertisement on page 130)

Zenith Mfg. & Chem., Corp., 82 Beckman St., New York 38, N. Y.
Instrument cleaning machines and solutions

Zernickow Co., O., 15 Park Row, New York 38, N. Y.
High-accuracy tachometers for rotational, peripheral and surface speeds for plant and laboratory use
(See advertisement on page 186)

Zero Manufacturing Co., 1121 Chestnut St., Burbank Calif.
Metal cases, cans, cabinets, housings for electronic, missile components

Zoomar, Inc., 55 Sea Cliff Ave., Glen Cove, L. I., N. Y.
Photometers; photomicrographic instruments; exposure meters
(See advertisement on page 136)

Zophar Mills, Inc., 112-130 26th St., Brooklyn 32, N. Y.
Waxes and compounds used in electronic and electrical industries

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And a more complete personal or company library assures easy accessibility to reference sources which can enhance your knowledge. Each of the books listed below is a "must" for the instrumentation library.

Operation and Care of Circular-Scale Instruments

by James Spencer profusely illustrated with circuit diagrams, schematic diagrams, and photographs. 1949.

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Process Control Analysis

by Millard H. LaJoy and E. Allen Baillit." . . . an essential first step in analysis of closed-loop controlled processes via frequency response of the system." 1956.

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Process Control

by A. J. Young, Head of the Central Instrument Laboratory, Imperial Chemical Industries, Ltd.
". . . a MUST for all men who have to do with the automatic control of industrial processes; combines the practical "how" and the theoretical "why." 1955.

cloth, 134 pages, illustrated ..Price $2.00

Applications of Industrial pH Controls

by Allen L. Chaplin, 1950.

cloth, 4½" x 8", 144 pages ..Price $2.00

Heat Inertia Problems of Automatic Control of Temperature

by Victor Broida, based on the concept of "fictitious mass" of heating process unit under automatic control. 1950.

paper, 5¼" x 8¼", 61 pages Price $1.00

The Automatic Factory

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by Allan Lytel. A valuable working tool; includes alternative and recommended practice for each step in design and production of printed circuits; a buyer's guide to special components; and "how to" service data. Paperbound, illustrated, 192 pages, 1957 **$2.00**

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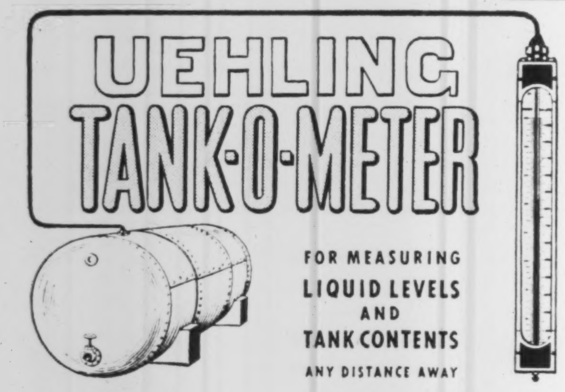

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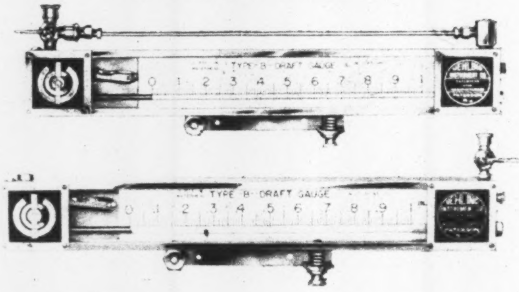

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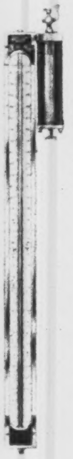

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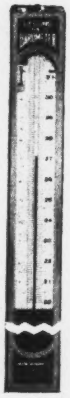

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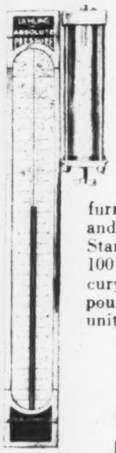

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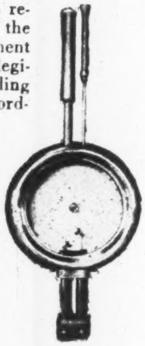

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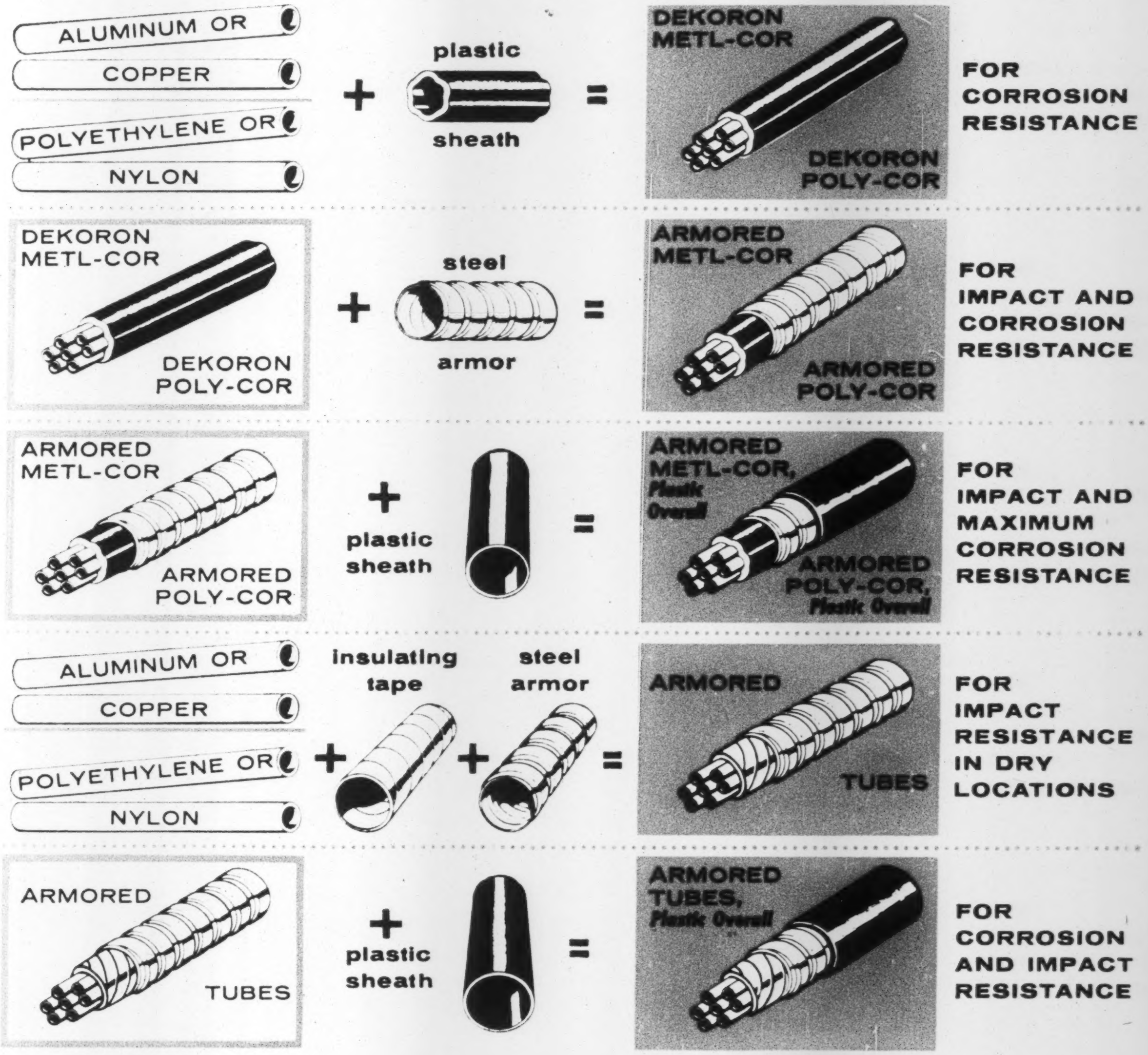
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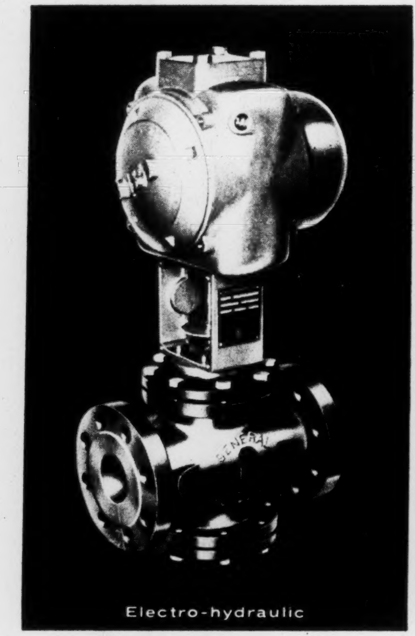

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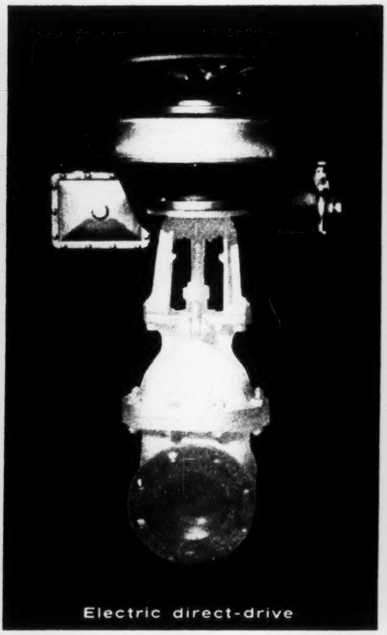

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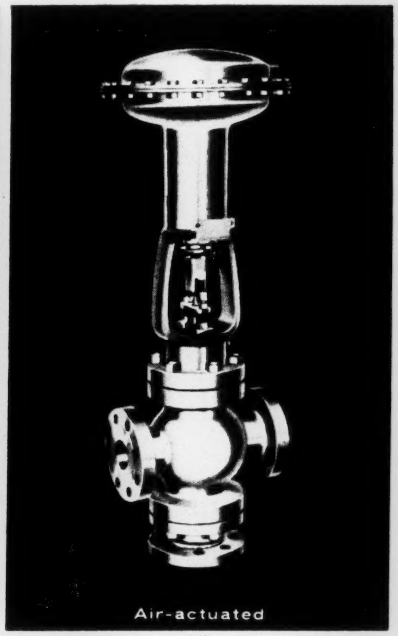

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